

A Strategic Review of the Community Health Centre Program

Prepared for:
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Executive Summary

This is a report of the strategic review conducted on the Community Health Centre (CHC) Program in Ontario. The objectives of the project were to:

1. Situate future development of CHCs within an overall plan that is aligned with key ministry strategies and government directions, including reform of the primary care system.
2. Assess the strengths and limitations of the existing CHC Program in terms of its ability to contribute to the achievement of Ministry's strategic priorities and government directions.
3. Identify service approaches in use within CHCs in Ontario for which clear evidence of effectiveness and/or efficiency has been documented in similar programs operating in other jurisdictions.
4. Describe adaptations in program design consistent with the core business and service philosophy of CHCs that would strengthen the CHC Program's ability to deliver on Ministry priorities.
5. Identify and assess factors to be considered in developing an implementation plan.

The review was conducted by assessing existing CHC program documentation; assessing pertinent Ministry strategies; conducting site visits of seven CHCs; targeted literature reviews; analysis of CHC approaches for selected health conditions and issues; documents and interviews with program staff; and reviewing primary care strategies in other jurisdictions in Canada and selected other countries.

There are 56 CHCs in Ontario with a core budget of just over \$100 million. An additional \$30 million is received from other sources to broaden the range of services provided. CHCs have a long history of working with disadvantaged people whose needs go beyond basic health care. These include those who have low income, street youth and homeless, isolated elderly, newcomers without an adequate base support in their new home communities, and those in rural and remote communities. CHCs are a distinctive primary care delivery model in that they are governed by community boards, deliver programs and services within a population health framework and have extensive community involvement, including volunteerism.

The health service needs of clients do not occur in isolation of the broader determinants of health - including the socio-economic environment of the community. Many services are provided not just to individuals, but also involve family members and members of the community. Centres utilize comprehensive approaches, including multi-disciplinary teams and integration of services, to meet the needs of clients. This review found that CHCs effectively address the key attributes of primary care: accessibility,

comprehensiveness, coordination, continuity of services, accountability, and attention to the needs of a specific community through specific health programs and services. The needs of CHC client populations extend beyond direct primary health care services. CHCs use a variety of strategies including outreach, home visiting, delivery of additional on-site services, and partnership with other service agencies to provide more comprehensive services.

CHCs are extensively involved in improving the capacity of individuals and communities. This includes minimizing the impacts of poverty in accessing health services but also improving language and employment skills; finding, maintaining and improving shelter; increasing access to nutritious foods; supporting healthy child development; and increasing community involvement and leadership.

There are a number of government strategies in which CHCs are actively involved. CHCs support healthy child development in a number of ways. In addition to their own core funded programming, they frequently provide space for Healthy Babies, Healthy Children staff improving opportunities for collaboration and service integration. Many CHCs are sites for the provision of the provincial Preschool Speech and Language Program and in Ottawa, a CHC functions as the lead agency for program implementation. In Toronto, a CHC delivers a Better Beginnings, Better Futures program.

Many CHCs are actively involved in supporting the provincial Diabetes Strategy. In Ottawa, a consortium of CHCs provide diabetes education in multiple languages. Other CHCs provide tailored diabetes education for groups who have difficulty accessing services due to language and literacy barriers. For many CHCs, individuals with chronic and persistent mental illness are a substantial proportion of their client population. As part of mental health reform, some CHCs host Assertive Community Treatment teams and mental health case managers. Several CHCs have made arrangements for shared care in which a psychiatrist provides consultation and support to the primary care providers.

In reviewing the services that CHCs provide, there are three key roles that these organizations fulfill. They provide comprehensive primary care services utilizing interdisciplinary teams to meet the needs of their clients. By working with individuals, families and groups from a determinants of health perspective, they contribute to increasing individual and community capacity. They are also a key source of community infrastructure from which they deliver a range of integrated community-based services.

Primary care reform in Ontario intends to have 80% of family physicians practicing in Primary Care Networks (PCNs) within the next three years. The objectives of this initiative are: improve access; improve quality and continuity of care; increase patient and provider satisfaction with the health care system; and increase cost-effectiveness of the services. The PCNs will have enrolled populations and the physicians will be paid primarily through capitation. The extent to which PCNs will utilize other health care providers such as nurse practitioners (NPs) is unclear. These initial reforms to the current fee-for-service system will not alter the need for CHCs. There will continue to be a need

for a primary care delivery model that has an explicit mandate to comprehensively address the health needs of higher risk populations.

Based upon the findings of this strategic review, the following recommendations are made:

Recommendation 1: Role of CHCs in Primary Care in Ontario

Recommendation:

The Ministry should ensure that CHCs play a strategic role in primary care reform for populations with barriers to access to care based on the following key Program strengths:

- **interdisciplinary team-based care that makes appropriate use of a broad range of health professions**
- **flexible service approaches that respond to population health needs**
- **programs that build community capacity to address broader health determinants**
- **accountability to communities served through community board governance and accreditation**
- **partnerships with other community stakeholders in needs assessment, as well as the design, delivery and evaluation of services**
- **an infrastructure that supports integration of primary care with the delivery of other health and social services**

Review findings that support this recommendation:

- CHCs meet many of the objectives of primary care reform;
- CHCs take comprehensive approaches to meet the needs of populations facing access barriers including disadvantaged populations in urban settings and geographically dispersed populations in northern rural and under-served areas;
- CHCs provide comprehensive services that effectively address the key attributes of primary care (accessibility, comprehensiveness, coordination, continuity of services, accountability, and attention to the needs of a specific community through specific health programs and services);
- The development of PCNs is not designed to improve the access to services of these key population groups;
- Compared with other primary health care delivery models in Ontario, CHCs have the broadest range of accountability mechanisms in place;
- CHCs provide an infrastructure from which other health and social services can be provided to a broad population base (this concept is being utilized in other jurisdictions such as Quebec and Manitoba);
- CHCs demonstrate strong collaboration among a broad range of health professions and a capacity to build partnerships with other community agencies.

Implementation of the recommendation requires:

- The Ministry ensure that existing CHCs have the resources necessary to enable them to play their identified role in the delivery of primary care services to populations facing access barriers.
- The Ministry fund a province-wide network of CHCs across the province in areas of greatest need.
- The Ministry to include CHCs in Telehealth initiatives.
- The Ministry build upon the Program's strengths and address current limitations as outlined in this report and subsequent recommendations.

Recommendation 2: Defined Range of Services and Required Hours of Service

Recommendation:

The CHC Program should require CHCs to provide a defined range of services and to provide scheduled primary care services on weekday evenings and weekends.

Review findings that support this recommendation:

- Primary care reform includes service components not fully in place in CHCs: list of defined set of services, weekday evening and weekend office hours;
- CHCs provide comprehensive primary care services including most of the services outlined in PCCCAR however funding is not tied to a list of defined services;
- CHCs have an MD on call on a 24/7 basis [most (~90%) provide some weekday evening hours but a minority (~30%) provide week-end office hours].

Implementation of the recommendation requires:

- CHC Program work with CHCs to define a list of services that CHCs will be required to provide.
- CHC Program require CHCs to provide a defined number of office hours for physicians/nurse practitioners including weekday evenings and weekends.
- CHC Program provide appropriate and adequate staffing and operating funds for the provision of weekday evening and weekend services.

Recommendation 3: Client Registration and Enrolment

Recommendation:

The CHC Program develop consistent criteria for determining which clients should be registered with the CHC as active clients.

Review findings that support this recommendation:

- Client enrolment is a common theme for primary care reform;
- CHC clients are currently registered with the CHC based on their utilisation of any clinical services;
- There will be a need for enrolment when PCNs have become a dominant delivery model;
- A proportion of clients, larger in urban areas, will not be enrollable due to the transient nature of their living arrangements.

Implementation of the recommendation requires:

- Observing the pace of implementation of PCNs (the greater the uptake of PCNs, the greater the need for CHCs to have enrolment).
- Develop criteria for registration and estimate the proportion of non-registered clients by CHC.

Recommendation 4: Competitive Salaries and Benefits

Recommendation:

The CHC Program institute competitive salary scales and benefits for all CHC staff.

Review findings that support this recommendation:

- Salaries have been frozen for all staff since 1992;
- CHCs are experiencing frequent vacancies and high turnover of staff;
- Physicians compensation particularly in remote and rural areas (Community Sponsored Clinic and Northern Group Practices) exceeds that offered by CHCs;
- In northern and rural areas salary scales offered to Nurse Practitioners by hospitals is higher than those offered by CHCs;
- Shortage of nurses and physicians in Ontario;
- With deregulation of tuition fees, particularly for physicians, new graduates will have increasing debt load;
- MDs are paid a single stipend for being on-call regardless of frequency of call requirements;
- Hay Consultants performed market review of non-MD staff pay rates and recommended an increase in most positions;
- MD pay rates do not appear to be competitive.

Implementation of the recommendation requires:

- Based on Hay Consultant's recommendations re-assess salary scales and make appropriate adjustment.
- Based upon Hay Consultants' recommendations, it has been estimated by the Ministry that implementation would cost \$4.5 million.
- CHC Program re-assess physician pay rates .
- Payments for staff who are on-call needs to better reflect differing situations among providers.

Recommendation 5: Expand Existing CHCs

Recommendation:

The CHC Program increase the staff complements and associated operating funds at existing CHCs where there is evidence of unmet service needs and it can be demonstrated that current staffing levels are inadequate to respond.

Review findings that support this recommendation:

- Clients with access barriers have limited options if there is no CHC in their community;
- Determinants of health that most affect CHC clients' need for service have not improved over the past decade;
- CHCs are increasingly less able to respond to service demands in their communities;
- Most CHCs are restricting access to new clients.

Implementation of the recommendation requires:

- Application of consistent measures to assess the factors contributing to unmet service needs at individual CHCs such as: increasing service volumes; service access restrictions; increases in needs/complexity/acuity of clients; deteriorating determinants of health; inadequate complement to provide full range of services, evening/weekend clinics; on-call coverage.
- Increases in staffing should consider the use of the most appropriate provider in responding to the needs identified in the population. Increases in staffing will require adequate management and administrative supports and physical space.

Recommendation 6: Expand the Network of CHCs to Increase Access

Recommendation:

The Ministry should work toward the creation of a province-wide network of CHCs to meet the needs of populations facing access barriers including geographically dispersed populations in northern rural and under-served areas and disadvantaged populations in urban settings to increase access to primary care services based upon community support and needs assessment.

Review findings that support this recommendation:

- Increasing difficulty accessing primary health care in rural and remote areas;
- Interest expressed by many rural, northern and urban communities for CHCs as a delivery model for primary care in their communities;
- CHCs' have an infrastructure from which to: recruit providers (including comprehensive benefits package), retain patients' charts in community if MD leaves, provide administrative support, deliver Ministry strategies (e.g. diabetes, mental health), lessen professional isolation, address broader range of determinants of health;
- Scope for a collaborative relationship between family physicians and nurse practitioners in rural and remote areas;
- U.S. experience in using CHCs to deliver of services in rural and urban communities;
- Urban areas in the province without CHCs with population characteristics similar to CHC clients elsewhere;
- Use of CHCs to extend reach of services by utilizing satellite services (e.g. Ontario, US, Manitoba);
- Use of CHCs as a mechanism to improve access throughout a jurisdiction (e.g. Quebec, Winnipeg, Vancouver).

Implementation of the recommendation requires:

- CHC Program develop and forward plan and budget for approval for expansion in the network of CHCs, based on community support and needs assessment.
- CHC Program work with other areas of the Ministry to develop needs-based planning criteria.
- Ministry staff from CHC Program and Northern/Rural Health Framework work collaboratively to address the potential overlapping and complementary roles between CHCs and hospitals in the planning of northern and rural services.

Recommendation 7: Strengthen the Role of CHCs in the Delivery of Ministry Strategies and Other Services

Recommendation:

The Ministry consider CHCs as a delivery vehicle for all provincial strategies that have an impact on primary health services including health promotion and disease prevention.

The CHC Program support CHCs' capacity to deliver and integrate community-based programming from non-provincial sources of funding.

Review findings that support these recommendations:

- CHCs receive over \$30 million in funding from other sources (e.g. other Ministry, MCSS, federal government, local government, NGO, etc.);
- CHCs provide other programming to their registered populations, catchment populations, and beyond;
- Programming is complementary and integrated with core CHPB funded services;
- Use of CHCs as delivery agents for this programming has been ad hoc in nature. Some communities have priorities that may not reflect particular government strategies, thus attracting different levels of participation among the CHCs.
- Lack of provincial coverage by CHCs impairs the ability to take full advantage of their potential to deliver other health and social services throughout the province.

Implementation of these recommendations requires:

- The delivery of key Ministry and provincial government strategies through CHCs needs to be an explicit objective of the CHC Program actively supported by the Ministry, the AOHC and CHCs.
- The delivery of other programming by CHCs needs to be an explicit objective of the CHC Program actively supported by the Ministry, the AOHC, and CHCs.
- The CHC Program continues to address physical space and administrative support requirements to support the delivery and integration of community-based programming.

Recommendation 8: Broaden Program Logic Model and Evaluation Framework

Recommendation:

The CHC Program expand the current program logic model and evaluation framework to better capture the key roles of CHCs: comprehensive primary care, building community capacity, and delivery and integration of community-based programs.

Review findings that support this recommendation:

- Underlying structure of current logic model and evaluation framework is focused primarily on processes;
- Core roles as identified in this review, particularly primary care activities, processes and outcomes have not been given sufficient consideration.

Implementation of the recommendation requires:

- CHC Program, AOHC and CHCs to review the current logic model and evaluation framework to ensure that a broader range of objectives, inputs, processes and outcomes are included. In particular, primary care activities and outcomes need to be more comprehensively captured.

Recommendation 9: Program's Information System

Recommendation:

The Ministry take immediate steps to ensure that the Program's information system becomes fully operational to meet the requirements of the Ministry and CHCs.

Review findings that support this recommendation:

- Implementation of the information system occurred in the fall of 1999;
- There is continuing difficulty in extracting data from the information system; neither CHCs nor the Ministry have been able to generate any routine reports;
- With a lack of reports, there is no feedback mechanism for CHC staff to encourage quality of data entry and this limits program planning, monitoring and enrolment;
- Concern expressed by some CHCs regarding the time required for data entry associated with each client encounter;
- Ministry IT, CHC Program and AOHC staff are working to address problems with the system and expect to have it operational by fall 2001.

Implementation of the recommendation requires:

- Ministry provide sufficient staffing resources to ensure that either: a) the current system becomes fully operational; or b) the development of a new system is implemented. Project status and potential to fulfill this recommendation should be assessed in fall 2001.
- CHC Program assess CHC training needs related to data entry, data content standards, data extraction and report generation.
- CHC Program provide support to CHCs so that they are able to fully utilize the information system once it becomes operational.

- CHC Program to have sufficient staff to be able to analyze and act upon the findings from the standard reports.

Recommendation 10: Performance Measures

Recommendation:

The CHC Program, in consultation with the AOHC and CHCs, implement performance measures reflecting the range of services CHCs provide including inputs, processes and outcomes.

The CHC Program support the efforts of CHCs to develop operational level performance indicators.

Review findings that support these recommendations:

- CHC service agreements have not included performance measures in the past;
- The CHC Program has been in the process of developing performance indicators since February 2000;
- This process has included the AOHC and CHC representatives;
- Sixty-eight draft indicators developed as of December 2000 were based upon the five process objectives of the evaluation framework;
- The indicators are predominantly process oriented, based upon qualitative questions, and do not adequately address primary health care services and efficiency measures;
- A broader set of indicator dimensions is now being considered.

Implementation of these recommendation requires:

- The CHC Program develop indicators along a full spectrum of services, (e.g. chronic disease management, preventive care, access, satisfaction, program efficiency, etc.). Strongly suggest experience with a few measures before expanding to a larger number of indicators.
- The CHC Program should routinely assess differences among peer groupings of CHCs in the performance measures (including efficiency measures).
- The CHC Program collaborate with the PCN initiative who have a current project to develop performance indicators for primary care.
- The CHC Program support CHCs to develop the capacity to generate their own measures of performance in contributing toward quality outcomes and best practices.

Recommendation 11: Best Practices

Recommendation:

The CHC Program support the development and implementation of best practices for key health conditions.

Review findings that support this recommendation:

- The current AOHC initiative to map out key processes to achieve desired outcomes should be helpful in identifying critical steps in the implementation of best practices;
- This process should be complementary to the development of program performance indicators (e.g. best practices supports how to achieve success in control of diabetes).

Implementation of the recommendation requires:

- Prioritization of programs for inclusion in the best practices initiative.
- Development of indicators to support implementation including input, process and outcome measures.
- Dissemination of best practices' approaches (e.g. communication of results, sharing of tools, peer mentoring, and peer comparisons).

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A Strategic Review of the Community Health Centre Program

INTRODUCTION

Rationale For Strategic Review¹

Community Health Centres (CHCs) are not-for-profit, community-governed organizations that deliver primary care and community health services throughout the province. The CHC Program has recognised strengths in delivering primary health services to disadvantaged populations and communities facing access barriers. Added strengths of the CHC approach include an emphasis on multidisciplinary care, service integration, a focus on promoting health and preventing illness, and developing partnerships to support communities in addressing health risks.

The Ministry of Health and Long-Term Care (Ministry) wishes to ensure that the CHC Program is aligned appropriately with key Ministry strategic priorities and government directions including primary care reform (i.e. the establishment of family health networks). Increasing staff complements of existing CHCs, and the introduction of new centres have been deferred for an extended period of time awaiting a review of the Program.

This review examines the strengths and limitations of CHCs as a means of organising and delivering primary health services, as well as the opportunities and challenges in using CHCs as a vehicle for delivering on key Ministry strategies.

Project Objectives

The objectives of the project are to:

1. Situate future development of CHCs within an overall plan that is aligned with key ministry strategies and government directions, including reform of the primary care system.
2. Assess the strengths and limitations of the existing CHC Program in terms of its ability to contribute to the achievement of Ministry strategic priorities and government directions.
3. Identify service approaches in use within CHCs in Ontario for which clear evidence of effectiveness and/or efficiency has been documented in similar programs operating in other jurisdictions.

¹ Rationale and objectives adapted from the review's Terms of Reference.

4. Describe adaptations in program design consistent with the core business and service philosophy of CHCs that would strengthen the CHC Program's ability to deliver on Ministry priorities.
5. Identify and assess factors to be considered in developing an implementation plan.

PROCESS

This review was conducted using a variety of approaches including the following:

- Review of existing CHC program documentation
- Review of Ministry strategy documents and interviews with program staff
- Site visits
- Literature review
- Analysis of CHC approaches for selected health conditions and issues
- Key informant interviews with contacts from other jurisdictions

The Ministry, the Association of Ontario Health Centres (AOHC) and project coordinator provided a variety of background documents and data on the program. Ministry documents for key policies and strategies were reviewed and details discussed with program contacts (Appendix 1). Site visits were conducted at seven sites (urban centres: Regent Park (Toronto), Davenport-Perth (Toronto), Pinecrest Queensway (Ottawa); rural centres: Woolwich, North Lanark; northern centre: Ogden-East End (Thunder Bay); francophone centre: (Sudbury). The purpose of the site visits were to: collect information on CHC approaches and services; elicit issues of concern from CHC providers, executive directors, and boards; and identify strengths and weaknesses of the CHC model. At several of the visits, meetings were held with CHC executive directors (EDs) from other centres to encourage broader input. The site visit questionnaire is shown in Appendix 2. The published literature was searched to supplement information from existing reviews. Details are provided within the appropriate sections of this report.

To assess the approaches and strategies used by CHCs, questionnaires were developed for 12 health conditions and issues, and the responses from CHCs reviewed. This was performed to supplement the lack of existing published literature on the effectiveness of primary care delivery models including CHCs. Questionnaires assessed the implementation of best practice recommendations, team approaches, coordination and case management, facilitation of access to services, and how socio-economic determinants of health were addressed. Further details on these conditions may be found in Appendix 3. Interviews were conducted with key informants involved in primary care and CHC programming in other jurisdictions to determine current and planned program direction. The list of contacts interviewed and initial questions used may be found in Appendix 4.

Due to the large number of abbreviations used in this report, a glossary of terms has been provided preceding the appendices.

Project Management

A steering committee with program specific expertise (Appendix 5) was convened to guide the work of the consultants and provide feedback at critical stages. This committee comprised Ministry staff (including Health Care Programs, Integrated Policy and Planning, and Health Services Divisions), as well as representation from the AOHC and CHCs. The Community and Health Promotion Branch (CHPB) managed the project.

THE CHC PROGRAM

Brief History of Community Health Centres

The concept of CHCs is not new. Mount Carmel Health Centre in Winnipeg was Canada's first CHC, opening in 1926.¹ The introduction of the Hospital Insurance and Diagnostic Services Act of 1957 and the Medicare Act of 1966 changed the way health care was organized, delivered and funded. In 1971, the Federal Government commissioned the Community Health Centre Project task group chaired by Dr. John Hastings.² This project was established for three reasons: i) concern that growth in spending on health services was accelerating; ii) growing belief that there needed to be a shift in emphasis from hospital in-patient care to other forms of care including CHCs; and iii) growing belief that CHCs were an effective way to respond to problems in the way existing health services were provided. The 1972 report, *The Community Health Centre in Canada*, recommended the development of a "significant number of community health centres...in a fully integrated health services system."

Quebec has been at the forefront in the development of CHCs (or, as they are called in Quebec, Centre Locale Service Communautaire (CLSCs)). They were launched in 1972 and are part of the regionalized health and social service system.³ There are approximately 146 CLSCs province-wide. They integrate health and social services and emphasize prevention, health promotion, and provision of other personal services, including occupational health services, delivered at one location.

In the 1970's, the Ontario Ministry of Health established the CHC Program as a pilot, funding ten CHCs in Toronto and Ottawa. These CHCs served predominantly poor, ethnically diverse, urban communities. The network of CHCs has grown to 56 with CHCs established in urban and rural settings serving identified priority populations (communities listed in Appendix 6). Priority populations include those who have difficulty gaining access to primary health services including rural and/or northern isolated communities and populations with a higher risk of developing health problems than the general population (e.g. immigrant, homeless, seniors, poor, street youth). The Community and Health Promotion Branch (CHPB) provided funding of \$100.7 million to CHCs in 2000-01.

Brief Description of Community Health Centres

Program Objectives

The stated objectives of the CHC Program⁴ reflect the fundamental values held by CHCs and are the organizing elements of the Program's logic model (Appendix 9):

- improved accessibility of services and programs
- more efficient service coordination and integration
- increased emphasis on illness prevention and health promotion
- a holistic approach to health which is client-centred
- increased individual and community responsibility for health

Populations Served by CHCs

CHCs have a long history of working with people who are disadvantaged, people whose needs go beyond basic health care. CHCs provide care to clients who might not be reached by a system that depends solely on those who require service taking the initiative themselves:

- low income and isolated elderly people
- low income families
- street youth and homeless people
- ethnic and racial minorities (some of whom might be recent immigrants or refugees without an adequate base support in their new home communities)
- rural and remote communities.

Presentation of Program data is hindered by the ongoing difficulties in extracting data from the Program's information system (see information system section for more details). Using a variety of sources, the Ministry was able to provide data for some demographic variables and services. The number of CHCs from which data is available varies for different variables and this information is provided.

The age distribution of clients is similar to that of the Ontario population with about 20% of clients aged 14 or under and 14% aged 65 and above (based on 44 CHCs). Clients aged 65 and above receive a higher proportion of service events than other age groups, which is expected.

The highest education level achieved by clients varies substantially among centres (44 CHCs). Overall, 24% of clients have grade eight education or less, although the range is from 5-49%. In Ontario as a whole, 10% of those aged 15 or over have a grade eight education or less (1996 Census, Statistics Canada).

Many of the families that are seen at CHCs are headed by single parents. Table 1 provides a breakdown of client family composition based on data available from 20 CHCs. Table 2 provides a breakdown of self-reported household income. Almost half of

clients have household income of less than \$15,000 per year. By comparison, the 1995 average household income for Ontario was \$54,400, (Statistics Canada). In urban settings, about 15% of clients are from single parent families. Within this group, over half of these families have incomes of less than \$15,000 per year. Approximately a third of clients come from other families with children. Within this group, about 50% have household income of less than \$25,000 in urban settings. Single person households constitute about 25% of urban clients and 12% of northern/rural clients. The proportion of these clients with income less than \$15,000 a year is about 70% in urban settings and 40% in northern/rural settings.

Table 1 - Client Family Composition in 20 CHCs (1998-99)

	Toronto (6 CHCs)	Ottawa (4 CHCs)	Other Urban (6 CHCs)	Rural (4 CHCs)
Single Parent Families	18.3%	15.1%	14.2%	5.2%
Other Families with Children	31.2%	24.1%	40.9%	40.3%
Single Person Households	24.0%	38.8%	28.6%	11.9%
All Other Households	26.6%	22.0%	16.3%	42.7%

Data provided by CHC Program, Ontario Ministry of Health and Long-term Care

Table 2 - Self-reported Client Household Income in 20 CHCs (1998-99)

	Toronto (6 CHCs)	Ottawa (4 CHCs)	Other Urban (6 CHCs)	Rural (4 CHCs)
<\$15,000	51.5%	45.8%	48.3%	44.4%
\$15,000-24,999	12.6%	13.3%	16.1%	13.5%
\$25,000-39,999	9.2%	10.8%	12.0%	11.1%
\$40,000-59,999	5.2%	15.8%	14.9%	13.0%
Other/Unknown	21.4%	14.3%	10.9%	18.6%

Data provided by CHC Program, Ontario Ministry of Health and Long-term Care

The percentage of clients who reported a language other than English or French as their preferred language of service averaged 14% across CHCs but ranged from 0.1-72% (44 CHCs). Home language use in Ontario being neither English nor French is 12.7%, (1996 Census, Statistics Canada).

Health insurance status of clients also varies substantially with the highest frequencies in urban settings, particularly Toronto (Table 3). This was as high as 70% in some centres.

Table 3 - Proportion of Uninsured Clients by CHC Setting (1998-99)

	Toronto (15 CHCs)	Ottawa (6 CHCs)	Other Urban (6 CHCs)	Rural (9 CHCs)
% Clients Uninsured	26%	17%	11%	4%

Data provided by CHC Program, Ontario Ministry of Health and Long-term Care

Service Delivery

CHCs register clients who receive clinical services. People whose involvement is limited to programs with a group or community focus do not register with the CHC but rather, are considered program participants. This means that participation in non-clinical CHC programs and services is not dependent on registration as a client with a primary care provider.

CHCs generally provide their services to people living within an identified geographic area (catchment area). The catchment area may be expanded to increase access to certain services or programs. These may be programs that are funded by the CHC Program (e.g. homeless) or funded from other sources (e.g. diabetes education or substance abuse treatment).

The CHC Program reports that as of December 2000, CHCs had 294,000 active clients. This represents about 2.5% of the overall population of Ontario. The Program reports that about half of active clients are seen in any one year. Being a client means that the individual has received some form of individual service during the last 3 years. Since this could be counselling or foot care, it does not necessarily mean the client is receiving all of their primary health care from the CHC.

Figure 1 shows the proportion of individual service events by staff type. The CHC Program provided a list of the most frequent client diagnoses for clients seen by MDs by CHC. The list of diagnoses was comparable to other primary care settings.

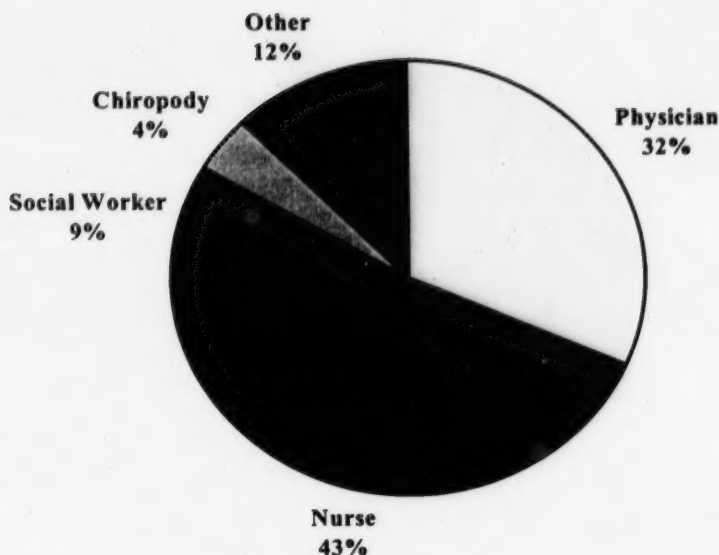


Figure 1: Percentage of Individual Service Events by Provider Type, 2000-01. Data based upon 33 CHCs. Data provided by CHC Program.

Many CHCs are involved in applied research initiatives to develop or pilot new programming. Student placements from a variety of disciplines occur in CHCs.

Program Funding

The CHPB funds CHCs on a program basis. This funding gives CHCs predictable revenue so that services can be planned and delivered within the budget base provided. CHPB defines the specific number of each type of staff CHCs are to have as well as salary scales.

Access to multiple sources of funding has permitted centres to develop programs to complement the services funded by the CHPB. Services funded from sources other than the Ministry's CHC Program are usually provided to the CHC's catchment area, but may be offered more broadly to ensure appropriate access or as a requirement of funding. While CHC Program funding from CHPB totals just over \$100 million, CHCs attract additional funding of \$19.8 million from other provincial sources (other Ministry branches and Ministry of Community and Social Services) and an additional \$13.5 million from non-provincial government sources (Figure 2). In six CHCs, the extent of other funding exceeds the level of core funding from the CHC Program. Non-provincial

government sources of funding include regional governments, the federal government and non-governmental organizations such as the United Way.

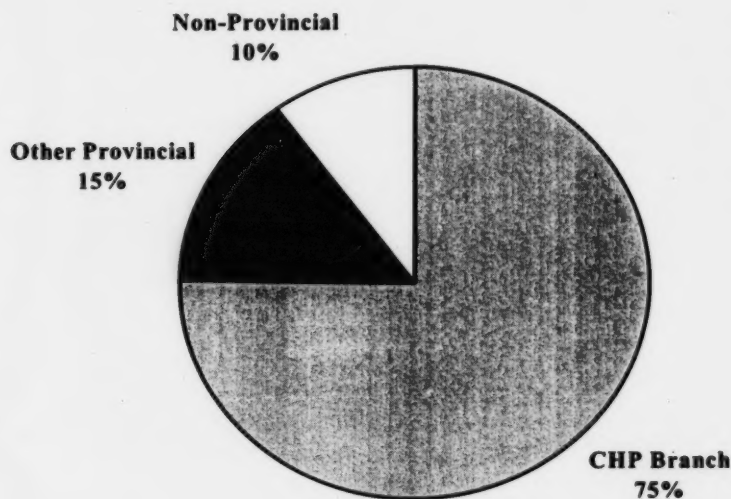


Figure 2: Proportion of CHCs' Funding by Source

Receipt of these local sources of funds is evidence of the credibility of CHCs as delivery agents for local resources. From a client perspective, these arrangements provide for greater accessibility to a broader range of integrated, community-based services. An important element is the extent to which the range of services appears to be seamless despite multiple funders. For example, the children's services provided at one CHC include:

- Home visits to high risk families in homes and family shelters; parenting and child development
- Parenting skill training in drop-in centres, parenting programs, and youth drop-in
- Speech and language services for children and their families
- Head Start nursery school for child enrichment and development
- Linkages with other service providers including Children's Aids Society (CAS) and Healthy Babies, Healthy Children Program (HBHCP)
- Primary care services

This range of services combines staff from other agencies housed at the CHC (e.g. HBHC, CAS); services funded from sources other than the CHC Program (e.g. speech and language, nursery school, drop-in centres); and the CHC core-funded staff . This is but one example of how CHCs can be hubs of service delivery for communities and be considered an example of community infrastructure upon which delivery of key Ministry strategies can be built.

Community Governance

CHCs are governed by an elected community board. The board ensures that the services provided to the community are relevant and appropriate and is accountable to the community and the funder. Boards range from 9-14 members and are elected at annual general meetings serving terms of usually 2-3 years. The AOHC provides varying types of support to boards to strengthen their functioning. For example, board development workshops are held at annual AOHC conferences and two workshop series are offered each year on topics such as board governance, appraising and supporting the executive director (ED), teamwork, and strategic planning. AOHC also has a dedicated staff person who provides support for boards and EDs involving quality assurance, risk management, human resources, board governance and other issues.

CHC executive directors and board members provided many examples of instances where the presence of the board ensured that community concerns were heard and addressed. Participation in the governance process should give those affected a real impact on decisions, enhancing not only their influence but also their understanding of the complexity of decision making.⁵ This involvement contributes to capacity building within the community. Community governance also aids the development of linkages to other programs and services since the selection of board members often has strategic importance. Boards frequently have a number of working groups and advisory committees which assist CHCs in needs identification, program planning and evaluation.

In circumstances where they are delivering other programs, CHCs need to ensure that there are mechanisms in place to achieve adequate representation in decisions affecting programs. CHCs currently achieve this by forming program advisory committees, often chaired by a board member.

The Health Services Restructuring Commission (HSRC) recommended that in the longer term, all primary care delivery groups should consider establishing more formal mechanisms such as governing boards made up of members of the enrolled population.⁶ The Provincial Coordinating Committee on Community and Academic Health Science Centre Relations (PCCCAR) recommended that to promote accountability to consumers, the Ministry should actively encourage and promote community-sponsored primary health care agencies.⁷

Volunteerism

Community volunteerism is another means of community involvement in CHCs. While volunteerism increases the potential reach and relevance of programming to the community, it is also a mechanism for community members to gain experience and confidence, and to increase capacity of their community. A 1999 survey of CHCs and AHACs found that in the 26 responding centres, there were 1,323 volunteers who provided 97,718 hours of service to program delivery and an additional 84,000 person-hours for board, committee, administrative, fundraising and other activities in 1999.⁸ This reflects not only a high level of community interest and involvement, but also the leveraging of additional resources.

OVERVIEW OF REPORT

This review consists of the following sections. Section I looks at CHCs within the context of the population health promotion framework. Section II examines CHC services in primary care and building capacity. Section III deals with the role of CHCs as a delivery model within primary care reform. Section IV describes the role of CHCs in the delivery of other key Ministry strategies. Section V describes the adaptations in program design consistent with the core business and service philosophy of CHCs.

SECTION I: THE POPULATION HEALTH PROMOTION FRAMEWORK: A CONTEXT FOR CHC SERVICES

The seminal document by the Hon. Marc Lalonde, *A New Perspective on Health of Canadians*, released in 1974, cogently stated that to achieve health, Canadians need to consider all four determinants of health: lifestyle, human biology, environment (including both psychosocial and physical environment) and the health care system.⁹ It was pointed out that in the past, for improving health exclusive attention had been paid to health care and there was a need to shift emphasis to the other three determinants of health. Since then, a number of publications including *Why Some People are Healthy and Others Not*¹⁰ by The Canadian Institute of Advanced Research, Wilkinson's studies¹¹ and others^{12,13,14,15} have conclusively shown that income inequality, child poverty and lack of individual empowerment have measurable effects on adverse health outcomes. Similarly, effects of inadequate housing and unemployment have been shown to have a negative impact on health.^{16,17,18} This has led to the concept of health promotion, which focuses on the determinants of health, particularly those often neglected by the traditional health care system, and promotes different strategies for achieving health.

There has been gradual evolution of the models and thinking about the concepts of health promotion and population health. The Ottawa Charter for Health Promotion¹⁹ provided a definition of health promotionⁱ and identified five elements of health promotion action:

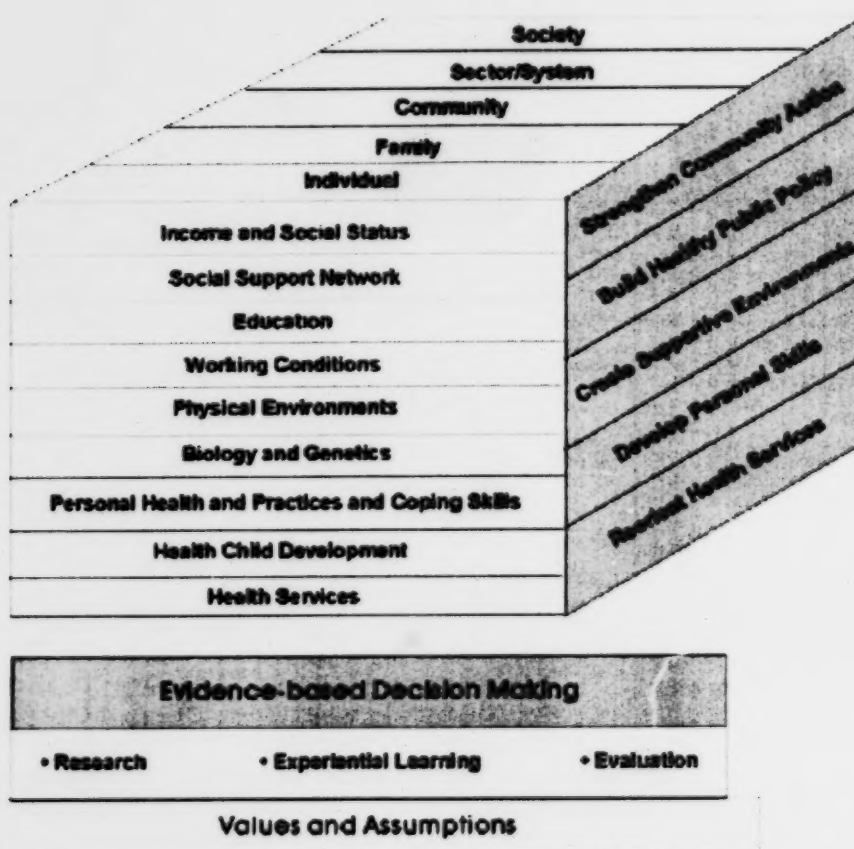
- Build healthy public policy
- Create supportive environments
- Strengthen community action
- Develop personal skills
- Reorient health services

A framework for health promotion was released in 1994 by the Federal/Provincial/Territorial (F/P/T) Ministers of Health, identifying the importance of the determinants of health and their contribution to population health status.²⁰ The health determinants identified were somewhat limited and were subsequently expanded in future work. A framework for population health promotion was suggested by Hamilton and Bhatti of Health Canada in 1996 to bring together the multidimensional concepts of health promotion actions, the broad range of health determinants, and the need to work at various levels of society (Figure 3). The values and assumptions underlying the model are listed below and are quite applicable to the CHC Program:

- Policy and program decision makers agree that comprehensive action needs to be taken on all the determinants of health using the knowledge gained from research and practice.
- It is the role of health organizations to analyze the full range of possibilities for action, to act on those determinants that are within their jurisdiction, and to influence other sectors to ensure their policies and programs have a positive impact on health. This can best be achieved by facilitating collaboration among stakeholders regarding the most appropriate activities to be undertaken by each.
- Multiple points of entry to planning and implementation are essential as demonstrated by the examples in the following section. However, there is a need for overall co-ordination of activity.
- Health problems may affect certain groups more than others. However, the solution to these problems involves changing social values and structures. It is the responsibility of the society as a whole to take care of all its members.
- The health of individuals and groups is a combined result of their own health practices and the impact of the physical and social environments in which they live, work, pray and play. There is an interaction among people and their surroundings. Settings, consisting of places and things, have a physical and psychological impact on people's health.

ⁱ Health promotion is the process of enabling people to increase control over, and to improve, their health.

- In order to enjoy optimal health, people need opportunities to meet their physical, mental, social and spiritual needs. This is possible in an environment that is based on the principles of social justice and equity and where relationships are built on mutual respect and caring, rather than power and status.
- Health care, health protection and disease prevention initiatives complement health promotion. Comprehensive approaches will include a strategic mix of the different possibilities for action. Meaningful participation of people in the development and operationalization of policies and programs is essential for them to influence the decisions that affect their health.



Population Health Promotion Model

Figure 3: Population Health Promotion Model (Hamilton and Bhatti, Health Canada, 1996).

In the delivery of services, CHCs utilize approaches by which many determinants of health are addressed in addition to the provision of health services. This is because the health service needs of clients do not occur in isolation of the broader determinants of health including the socio-economic environment of the community. Many services are

provided to individuals, but also involve family members and members of the community. The next section will describe these services in more detail. Examples are presented illustrating how CHCs deliver services across the various dimensions of the Population Health Promotion Model.

SECTION II: CHC SERVICES – DELIVERING COMPREHENSIVE PRIMARY CARE AND BUILDING CAPACITY

This section deals with evidence (both from the literature and from the findings of this review) of the effectiveness of the approaches used by CHCs.

Primary Care

There are many definitions available for primary care. PCCCAR described it in the following way.⁷

Primary health care consists of first-contact assessment of a person and the provision of coordinated care for a wide range of health concerns within a sustained relationship. It combines a focus on individuals and families with a focus on the health of a defined population within a community. Primary health care is delivered by a variety of health professionals and providers working collaboratively with the consumers to maintain health, support wellness and treat illness. Full participation of consumers and accountability to consumers and to the community for high quality and comprehensive services are essential features of primary health care.

The US Institute of Medicine (IOM) defines primary care as “the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.”²¹ The IOM identifies key attributes to primary care, including accessibility, comprehensiveness, coordination, continuity of services, accountability, and attention to the needs of a specific community through specific health programs and services. This definition appears particularly relevant to the work of CHCs and fits well with the Program’s objectives and logic model. The following subsections describe how CHCs address the key attributes of primary care.

Effectiveness of CHC Service Approaches

Published studies assessing the effectiveness of the CHC model, CHC physician practices and inter-disciplinary team-based services are reviewed below. Awareness of the limitations of data assessing primary care delivery models in general,²² and CHCs in particular, prompted an assessment of CHC practices and approaches for a series of health conditions and issues (see Appendix 3 for more details). Discussion of the findings for individual health conditions will be presented in this and subsequent sections. The

analysis of the health conditions is qualitative in nature, examining the descriptive responses provided by CHCs to identify common themes and illustrative examples in the approaches and strategies that CHCs utilize.

CHC Model Effectiveness

Extensive reviews of the literature were performed by ARA Consulting in 1992²³ and by Abelson and Hutchison in 1994.²⁴ Overall, studies have largely been descriptive in nature and those that have attempted to assess cost-effectiveness have failed to establish the necessary design features that will enable meaningful comparisons. These include defining the intervention population, defining and measuring the interventions, defining and measuring the outcomes, and finding an appropriate comparison group. Methodology problems with one or more of these considerations limit the strength of any conclusions. As such, the reviews identified some evidence CHC patients have lower health care costs compared to those served by fee-for-service (FFS) and that CHC patients have lower rates of hospitalization. These observations are based upon studies published in the 1980s. It is unfortunate that since then no substantive effectiveness evaluations have been conducted which could more directly inform decision-making.

Evaluation of CHCs in the United States found similar limitations, as most studies were dated and had significant methodological problems.²⁵ American studies are also problematic since in the absence of universal health care, the presence of a CHC will invariably increase access to care.²² Searches of the literatureⁱ subsequent to 1994 located a study from Maryland comparing the quality and cost of services provided to Medicaid patients by hospital, private physicians, and CHCs.²⁶ While the study found no overall relation between costs and quality of services provided, there was generally a higher quality of care for patients in CHCs after controlling for severity of condition.

CHC Physician Practices

Several studies have assessed the quality of clinical practices by physicians in CHCs compared with FFS settings. Many of the studies were based on Quebec CLSCs. A study published in 1980 reported that CLSC physicians were less likely to prescribe medications and more likely to provide alternative therapy for simulated patients with tension headaches.²⁷ A study published in 1983 reported that physicians in CLSCs self-reported greater use of preventive activities compared with FFS physicians in rural and urban settings.²⁸ Analysis of cancer screening practices in a random sample of Quebec primary care physicians found that mode of remuneration (CLSC or family medicine centre vs. FFS), continuing education, gender of physician, provider-related barriers to prevention, and knowledge were the major predictors of screening practices.²⁹ Further analysis of 1983-84 physician survey data found that CLSC physicians compared with FFS physicians at that time were more likely to be much younger, female, have

ⁱ Medline and HealthStar searches: 1993 to 2000 "Community Health Centers", "Cost-effectiveness", "Program Evaluation", "CLSC",

completed a residency in family medicine (vs. a general rotating internship), and hold different attitudes towards multidisciplinary delivery of health care, greater patient education and patient involvement.³⁰ These studies are almost twenty years old and relied on self-reports of practices. Their relevance to the current environment is unclear. A more recent southern Ontario study used trained patients to assess preventive care by physicians working in CHCs, Health Service Organizations (HSOs), and FFS practice.³¹ Physicians working in alternative payment environments were more likely to provide evidence-based preventive care compared with those in FFS practice. While salaried physicians performed 47% of recommended practices, FFS physicians performed 39%. Including type of remuneration and several other variables only explained 26% of the variation in physician practices. Physician payment type and group/solo practice were the only organizational context variables assessed.

These studies as a whole suggest problems with implementing preventive practices in FFS settings compared with alternative payment settings (i.e. CHCs, HSOs, and university family medicine centres). Recognizing this, primary care reform in Ontario and in other jurisdictions include incentive payments to encourage preventive practices. While there are potentially many possible factors involved in better preventive practices being performed in settings such as CHCs, one may be that the organizational context may support better practices. This has been observed in US Health Maintenance Organizations (HMOs) which frequently have comprehensive approaches to influence provider behaviour and have been shown to have higher levels of implementation of preventive practices.³²

Inter-Disciplinary Team-Based Services

There have been several reviews of the literature assessing the use of interdisciplinary teams.^{24,33} To supplement this, searches were conducted of recently published literature.ⁱ Much of the literature on the effectiveness of interdisciplinary primary care provision is based upon studies of nurse practitioners (NPs). Mitchell et al. provide their own review of the literature as well as findings from previous reviews by the American Nursing Association and the US Office of Technology Assessment.³⁴ Overall, studies show that NPs achieved equivalent outcomes to physicians or scored more favourably on a variety of measures including equivalent or greater satisfaction with the health care provider, compliance with health promotion/treatment recommendations, and spending more time per visit with patients. In many of the studies, NPs were working in conjunction with physicians (MDs). A more recent study assessed outcomes for chronic conditions of patients treated independently by NPs or MDs and found comparable outcomes.³⁵ Results were only based upon 6 months of observation in a relatively healthy population, and did not appear to include the evaluation, diagnosis, and treatment of a broader range of patients.

The potential for NPs and MDs to work synergistically has been outlined by the Ontario College of Family Practice (OCFP).³⁶ With complementary skill sets, each profession can

ⁱ Supporting search strategy: Medline: "patient care team" "effectiveness" "primary health care"; HealthStar: "patient care team" "effectiveness" "primary health care"

contribute to the care of clients with the added benefit of role substitution with cost savings, as well as freeing the MD to address more complex problems. The HSRC recommended that at least one NP should be part of every Primary Health Care Group Practice forming a core MD/NP team.⁶ The HSRC makes the following statements regarding the benefits of inter-professional providers:

- Increased quality of care since consumer receives services from the professional who is best qualified; e.g. MD diagnose and treat consumers with complex medical problems; NPs advise on health promotion and disease prevention, diagnose, and provide comprehensive health assessments; pharmacists advise on medication issues; social workers play active roles in case management and mental health counselling;
- Coordination and continuity of care via provider collaboration and teamwork;
- Maximize skills use and recognition of expertise of various professionals which will increase job satisfaction;
- Capitalize on skills of health professionals; improve their utilization and improve access to primary care in underserved areas;
- Cost effective to use skills of a variety of health professionals in addition to MDs.

The ideal ratio of MDs to NPs is unclear. The Ontario Medical Association (OMA)/Ministry pilot projects recognize a NP role by increasing the maximum size of a practice roster if a NP is employed. The HSRC had recommended that the ratio would vary depending upon setting with the MD:NP ratio being 3:1 in urban settings, 1:3 in remote locations, and 1:1 in rural settings.⁶ The rationale for these recommendations is not provided but may reflect chronic difficulties in recruiting physicians for remote and rural settings. At a recent Ontario Hospital Association conference, speakers argued for different ratios with family medicine arguing for more MDs than NPs and the nurses stating there should be just as many NPs as MDs, if not more.³⁷ Presumably the relative balance of staff needs to consider the complexity of client needs, on-call responsibilities, the need for MDs to be available for consultation to NPs, the scope of practice of NPs, and additional responsibilities to local hospitals (e.g. emergency room (ER) coverage, in-patient care).

There have been various attempts to estimate the proportion of a general practitioner's (GPs) work that could be performed by other staff such as nurse practitioners. A review by Richardson et al. suggested that somewhere between 25-70% of tasks performed by a doctor could be carried out by other health professionals.³⁸ Many of the studies were based in the US in the 1970s at a single site with small sample sizes and poor design. Few studies used adequate measures of health outcome or costs. A UK-based study of ten practices determined that 39% of GP visits had some element that could have been delegated with 17% having the potential for complete delegation.³⁹ The largest category for delegation opportunities was in providing advice and reassurance. While the UK National Health Service has on average 2.3 staff per GP, the vast majority of these are administrative staff. Further details are provided in the discussion of other jurisdictions in this report. Current MD:NP ratios in CHCs range from 3.2:1 to 1:1.5, (with the exception of one urban CHC serving youth which is 1:2.5). This existing variation in staffing ratios

should permit analysis of the relative advantages and disadvantages of different ratios in different settings.

The HSRC recommended that in addition to the MD/NP core team, additional clinical support from other providers such as midwifery and mental health was indicated. The PCCCAR report, while identifying that there should be increasing use of interdisciplinary team-based care, stated that it was not appropriate for the province to define which health professionals would constitute a primary health care team. However to support more effective integration and co-ordination of services, primary care agencies should develop formal linkages with midwifery groups, mental health workers, home care program and public health providers.

Beyond the use of NPs, there has been limited research to understand the components and mechanisms of primary health care teams. The review by Abelson and Hutchison concludes that "despite widespread support for multi-disciplinary approaches to primary health care delivery, only weak evidence exists to indicate that this approach leads to the delivery of more effective or efficient care." The F/P/T literature review states that: "while most researchers are convinced of the desirability of the team approach, it is not clear if the beneficial effects are due to the multidisciplinary nature of the team, to some other characteristics or to a combination of factors."³³ Part of the challenge is that teams do not automatically form just because different people are put together but require the investment of time and money in team development.⁴⁰

Despite these recurring statements of the lack of evidence for multidisciplinary teams in primary care, in some settings there is clear evidence that specific team approaches are effective. For example in the treatment of individuals with mental illness at high risk of institutionalization, Assertive Community Treatment teams are effective at improving clinical status and reducing hospitalization.⁴¹ Current evidence-based diabetes management guidelines clearly state that diabetes care should be organized around an interdisciplinary diabetes health care team including the primary care physician, diabetes specialist(s), and diabetes educators.⁷¹ Current guidelines for the management of asthma identify asthma education as an essential component of therapy which emphasizes the importance of interdisciplinary approaches.⁶⁷ Optimal methods for educational intervention remain unclear but the development of national certification for asthma educators has been developed. These examples involving common chronic disorders clearly identify the importance of multidisciplinary approaches in particular situations.

The PCCCAR report recognized the importance of mental health issues in primary care noting that about 40% of people who visit a primary care physician have an identifiable emotional or psychiatric problem. In some CHC settings, the proportion is substantially higher and is compounded by additional stressors (e.g. poverty, food security, inadequate housing, language, resettlement, etc.).⁴² It therefore seems reasonable that a social worker (SW) or mental health counsellor should be part of the core provider group. Most CHCs (93%) are staffed with one or both of these positions. A study of the personal doctor program in Finland from the 1980s showed that a small team of one MD, two nurses and a social worker was most successful in the organizational restructuring of the delivery of

care.⁴³ This study was primarily concerned about reorganizing how physicians worked so that they would provide care throughout the spectrum of primary care instead of the previous approach of being program based. Unfortunately, the authors do not elaborate further on other aspects of service organization or delivery.

Existing information suggests that the core primary care team should be comprised of NP/MD/SW with further inclusion of staff depending upon the availability of services within the community and the needs of the population.

Status of Interdisciplinary Teams at CHCs

As a provider of interdisciplinary primary health services, all CHCs have funded positions for MDs, NPs and health promoters and the majority have funded positions for nurses (RN), social workers, counsellors and nutritionist/dietitians. Eight CHCs have a total of six full-time equivalent (FTE) physiotherapists and 3 FTE occupational therapists on staff with an additional six CHCs purchasing part-time services. Over a third of CHCs are currently staffed with chiropractors. Chiropractic services are not particularly accessible to the general population. Certain higher risk populations such as the elderly, homeless, and diabetics have particular need for foot care. Few CHCs have speech language pathologist positions staffed at their centres. However with the preschool speech and language initiative, CHCs have an opportunity to be service delivery agencies for their local/regionalⁱ areas. Other staff positions (e.g. outreach worker) have not been addressed in this section because their role is primarily more within the area of building community capacity. Staff are further supplemented by purchase of services as well as additional staff from other funded programs.

CHC clients tend to have multiple, complex needs which require a range of skills to meet these needs. To address these needs, CHC services are based on interdisciplinary teams. CHC staff work together in a variety of ways. Clients will have an identified NP or MD who provides care. That individual will then involve other providers as required. In some instances, for example prenatal visits, visits will alternate between the NP and MD. Teams are structured in different ways depending upon the issue. For example, a primary care team made up of MD, NP, RN, and SW will meet to discuss particular clients and other providers such as the chiropractor, community care access centre (CCAC) manager, and outreach worker may join the meeting to discuss particular clients. Similarly, a diabetes team made up of MD, NP, RN, nutritionist, and chiropractor will meet to discuss the care of diabetes patients. Health promoters providing individual counselling or group programming will also become involved as required. A CHC with extensive youth programming will likely have a youth team with counsellors and outreach workers which the MD, NP, or SW will provide consultation. Team or staff can also call on other staff such as speech and language counsellors or CAS workers or employment or housing workers who may be on location as well. At one large CHC which delivers a wide range of health and social services programming, new clients meet initially with a staff person

ⁱ Regional: term used here refers to services provided to program participants beyond the CHC's primary care registered population; frequently extend beyond the CHC's catchment area. Does not necessarily relate to the boundaries of regional municipalities or Ministry planning regions

to determine the range of their needs and then arrange for those with greatest priority to get attention first.

Case Management and Case Coordination

Case Management

The provincial case management project defines case management as: "a service consisting of inter-related activities designed to support clients in their efforts to achieve optimal health and well-being in a complex health and social environment and where resources are finite."⁴⁴ Evidence for effectiveness of case management is limited to particular settings such as mental health and long term care.²⁴ The review of best practices in mental health reform identifies that case management is a critical ingredient of community focused mental health services but that there is no standardized definition of the approach.⁴¹ The report does however identify key functions of case management which are: assessment, planning, linking, monitoring, advocacy, and providing constant and ongoing support. CCAC case managers are co-located in many CHCs. Depending upon the extent of other service funding, formal mental health case management services are provided in many CHCs through Assertive Community Treatment teams or mental health case managers. In the absence of these services, CHC staff perform some of these roles.

Co-ordination of Care

An important component of primary health services is coordination of care. Clients frequently require services from a variety of providers both within and outside CHCs. Benefits of coordination include integrated, seamless care, and more informed caregivers resulting in less duplication of services.⁶ The previous subsection outlined the potential benefit of interdisciplinary service provision. CHCs tackle the required communication between providers through a variety of mechanisms. Use of common client charts for multiple providers facilitates communication of service activities and interventions between providers. While informal communication between on-site providers is part of normal day-to-day practice, multi-provider case conferencing is also the norm where providers present cases to further discuss how the team may better serve the needs of specific clients.

CHCs have developed linkages with other providers, particularly psychiatrists, to provide case consultation and conferencing on how to address the needs of clients with significant mental health issues. For example, downtown Toronto CHCs have made arrangements to have a psychiatrist provide onsite case conferencing and consultations on a regular basis. Not only does this assist with management of individual clients, but it acts as a teaching opportunity to enhance provider skills which can be applied in dealing with other clients. This type of arrangement has been shown to improve the recognition, management and referral of psychiatrically ill primary care patients.⁴⁵

Integration of Services

For clients with multiple needs, staff routinely coordinate linkages with other health and social service agencies such as: housing (i.e. finding shelter accommodation, linkage with housing worker), addiction services, specialist medical services, Ontario Health Insurance Program (OHIP) registration, child development and family home visiting programs (e.g. Better Beginnings, Better Futures (BBBF), HBHCP). The co-location of other agencies' services is a key aspect of CHCs facilitating multi-service access for clients as well as facilitating communication between providers. Common examples include HBHCP home visitors, CCAC case managers, preschool speech and language service providers, mental health workers, and midwifery. Co-location of services is dependent on the availability of adequate physical space within CHCs to host and house these different providers. This aspect is taken into account in CHC capital project discussions.

In summary, CHCs provide case management and coordination of care and integration of services. In the following subsection examples are given to indicate the extent to which CHC health care teams follow best practices in preventive health care and the management of chronic conditions.

Preventive Health Care

As previously described, questionnaires were sent to 6 CHCs to gather information on their approaches for a variety of health conditions.

Immunizations

Routine immunization of children is among the most cost-effective and for many, cost-saving interventions available.⁴⁶ Due to the introduction of immunizations, many serious childhood diseases which were previously common have become relatively unknown (e.g. polio, diphtheria, hemophilus influenzae b, meningitis and epiglottitis). The elderly, those with chronic medical conditions and those individuals with disturbances of spleen function are at increased risk of serious pneumococcal disease. Influenza is a potentially serious disorder particularly for the elderly and those with chronic medical conditions. The Canadian Immunization Guide provides the guidance for the immunization schedule of adults and children in Canada.⁴⁷ The pneumococcal vaccine and annual influenza immunization are recommended for the identified high risk groups. Evidence exists for several effective interventions to increase vaccination among children, adolescents and adults.⁴⁸

CHC Practices

Information on immunization coverage is limited. Calculation of coverage rates requires capturing not only what services the CHC provided but also immunizations performed elsewhere in the past. Efforts are made to provide targeted services for new immigrants

requiring school entry immunizations. In some parts of the province, public health departments have made arrangements to refer these clients to CHCs.

CHCs hold flu vaccine clinics for the general population at their main sites and in community locations including shelters. Transportation is often organized to bring seniors to the clinics. One responding CHC mails flu vaccine reminders to seniors and some others are considering implementing such a system.

Without coverage data being available, it is not possible to know if additional strategies should be utilized to encourage immunization. The current CHC data system does not permit calculation of coverage rates and this gap will need to be addressed in future modifications. Collaboration with the PCN pilots is recommended since they will be grappling with similar issues.

Cancer Screening

Breast cancer is the most frequently diagnosed cancer in Canadian women, accounting for about 30% of all new cancer cases each year.⁴⁹ Screening is recommended for women aged 50-69⁵⁰ and possibly for those 40-49.⁵¹ Cervical cancer is the eleventh most frequently diagnosed cancer among Canadian women although it is the second most common form in women worldwide.⁵² Women who are older, of lower socio-economic status, and those infected with HIV are at increased risk of cervical cancer.⁵³ Women of all ages who are, or have ever been, sexually active should be screened for cervical cancer.⁵⁴ Screening rates for both cancers are lower in women with lower education and low income, recent immigrants, and rural residents.^{55,56} How best to increase screening coverage rates is currently an area of active research.^{57,58,59}

CHC Practices

The current CHC information system is intended to capture and report upon the proportion of women of appropriate age groups screened for these cancers. Unfortunately, continuing difficulties in extracting data from the information system has prevented CHCs from providing data on coverage rates. It also severely limits the ability of CHCs to generate provider and client reminders, both of which have been shown to increase coverage rates.

In one CHC, they have developed a database that allows them to have a recall system for Pap smears and have developed an on-site colposcopy clinic. They have found that they have very few no-shows and have targeted women who were lost to follow-up at the colposcopy site in their city. For patients screened through Ontario Breast Screening Program (OBSP), the OBSP program sends out the reminders to clients.

To promote cancer screening, CHCs provide speakers and workshop leaders to meet with various groups. To increase accessibility to screening and other services, outreach activities target particular populations (e.g. sex trade workers, shelters). One CHC has created an evening clinic that emphasizes preventive health care for women.

Without coverage data being available, it is not possible to know if additional strategies should be utilized to encourage cancer screening. The current CHC data system does not permit calculation of coverage rates for breast cancer screening. CHCs were able to generate coverage rates for cervical cancer screening but the data's validity is suspect (e.g. low denominators of adult female clients). These gaps in the capacity of the information system will need to be addressed in future modifications.

Best practice recommendations for maximizing the use of preventive services such as immunizations and cancer screening include the use of patient and provider reminders. In the past, many CHCs used reminders and interest in continuing to do so was present in most centres. Frustration with the inability of the current information system to perform these functions was widespread.

Smoking

Smoking is the leading cause of preventable death in Canada. Smoking cessation has been shown to reduce tobacco-related morbidity and death and health-care provider interventions can increase the rate of cessation success. Exposure to environmental tobacco smoke (ETS) is a cause of morbidity and death and reducing exposure to ETS would be expected to reduce the risk of these outcomes.

Efforts to reduce tobacco-related morbidity and death include strategies to reduce ETS exposure, reduce initiation of smoking and increase tobacco-use cessation. The latest in a series of instrumental reports from the US Surgeon General was recently released highlighting the current knowledge for tobacco control.⁶⁰ A recent report from the Task Force on Community Preventive Services identifies the most effective interventions.⁶¹

CHC Practices

CHC provider staff have participated in smoking cessation training which is available in Ontario from a variety of sources including the OMA and the Program Training and Consultation Centre (PTCC). The client profile sheet attached to the front of the chart contains information on their smoking status. Clients are regularly asked about their smoking status at periodic health examinations and other times of client contact. Smoking cessation programs are provided in some CHCs. In Ottawa, the local health department provides funds to the CHCs for them to provide cessation programs on a region-wide basis.

While there is evidence that pharmacologic treatments increase the chance of cessation success, these medications are not covered by Ontario Drug Benefits (ODB). This is therefore a barrier for low-income clients. Unlike some other types of medications, pharmaceutical companies do not provide free samples. CHCs have begun to test individual counselling with free/low cost medications. Phone support is available from staff for those trying to quit.

A survey of CHCs and Aboriginal Health Access Centres (AHACs) was conducted in mid 2000 with a response rate of 66% and 100% respectively. A key barrier to more involvement in tobacco control efforts was a lack of financial and staff resources. Staff at some site visits expressed the view that tobacco cessation was not a priority as smoking is one of the few coping mechanisms that some clients have. These CHCs tended to serve a high proportion of homeless and people with mental health issues so that there is a focus on creating stability (e.g. housing, food, other basic needs) prior to engaging clients on behavioural change. Other CHCs that view smoking as a higher priority have been involved in the development of smoking cessation programs, including one program for low income women which is now used nationally. There is current work assessing smoking cessation programs for immigrant populations. According to the survey, 20% of responding CHC/CHACs were involved in coalitions such as Heart Health, Cancer Prevention and Tobacco Councils.

Populations served by CHCs (low income, aboriginal, francophone, immigrants) will have higher than average smoking rates. Despite similarities in populations being served, there is a wide variation in the degree to which CHCs view tobacco as a priority health issue. More comprehensive and consistent strategies are required across the CHC network. This is an area where the best practices initiative could prove useful in the dissemination and support of organizational responses. The leadership demonstrated by some CHCs in this area should be used to full advantage. In addition, the CHC Program needs to consider how to financially support the cessation efforts of low-income clients.

Management of Chronic Conditions

Human Immunodeficiency Virus

As of 1999, a total of 20,342 people in Ontario had been diagnosed with HIV, and about 14,400 were alive and living with the illness. The total number of new infections each year, which had been dropping steadily since 1991, began to level off in 1997 and, between 1997 and 1999, remained fairly stable at between 900 and 1000 a year. Groups with high rates of infection continue to include men who have sex with men (MSM), injection drug users (IDUs), Aboriginal peoples, and people from countries where HIV is highly prevalent or "endemic" (i.e. sub-Saharan Africa and the Caribbean).⁶² Infection rates in MSM, particularly in Toronto and Ottawa, have recently increased.⁶³ Injection drug use is the most frequent means of HIV transmission. While overall HIV prevalence for IDUs in Ontario is 4.9%, prevalence in Ottawa is 14.5%. Thunder Bay and Sudbury also have infection rates that are cause for concern. Data on Ontarians from HIV endemic countries indicate an increase from 2.9% of cases in 1981-1995 to 14% of cases in 1997-1998. HIV rates in Aboriginal populations in Canada have been increasing exponentially over the past decade.⁶⁴

CHC Practices

CHCs have been extensively involved in providing HIV programming. Prevention and education counselling is given in clinical encounters and during outreach contacts. Some

CHCs have specifically developed outreach initiatives for specific populations in their areas. For example one responding CHC has an outreach worker who in partnership with other agencies (e.g. public health) provides condoms and counselling to IDUs. The CHC also uses youth peer educators to target key ethno-cultural communities to provide information, education and linkage to other services. Condoms are readily available at CHC sites and through outreach workers. While some CHCs provide needle exchange services, others partner with existing needle exchange programs to facilitate access. CHC staff have directly assisted community partners to deliver HIV prevention programs and participated/published education strategies for ethno-cultural groups.

Nominal and non-nominal testing is available at all CHCs by appointment with some sites able to offer it on a walk-in basis as well. Anonymous testing is available at some CHCs or available through community partners. In some instances, anonymous testing is provided by a CHC for populations beyond their catchment area.

Some CHCs provide care for large numbers of HIV positive clients. Specialty HIV care is utilized as required with case conferencing to ensure continuity of care. In addition to the medical care provided, CHCs also provide assistance and support through social work, mental health counselling and outreach services. CHCs also ensure that clients have access to a variety of resources and supports including referral to support groups provided by local AIDS service organizations.

With a large HIV positive client population, CHC staff are actively involved in a variety of professional development initiatives including receipt of regular updates and treatment guidelines from expert groups, e-mail discussion groups, conference attendance, and hospital HIV rounds.

In response to community needs one CHC, in partnership with 30 agencies, developed a regional HIV program for clients unable to access mainstream health and social services. Comprehensive primary care and social services are provided. The program is linked with anonymous testing and provides outreach to homeless people, IDUs, and sex trade workers. This program has a weekly support group for HIV positive men who are in recovery and a women's health promotion group supporting women who are HIV positive or at risk of HIV. The program partners with other agencies to develop convalescent and palliative care to clients who are homeless and living with serious illness. Housing supports are co-located with the program services.

CHCs partner with other agencies in providing public education, advocacy, and the planning and delivery of services. Examples include: developing palliative care for the homeless; development of support groups; education and mentoring of other primary care providers to provide care to those with HIV; and home hospice program. Currently a coalition of CHCs and AIDS service organizations are pioneering research examining service/treatment barriers faced by immigrants and refugees with HIV/AIDS to explore strategies and ways of eliminating these barriers.

Asthma

Asthma is a chronic lung condition characterized by difficulty in breathing due to airway inflammation and bronchoconstriction. Symptoms include wheezing, coughing, shortness of breath and chest tightness. About 12% of children and 6% of adults have been diagnosed with asthma with the prevalence of asthma in children having increased in the past 15 years.⁶⁵ In Ontario, asthma is the leading cause of hospital admissions in childhood.⁶⁶

Asthma appears to be due to a combination of predisposing factors (e.g. atopy), causal factors (e.g. cat and animal dander, dust mites, cockroaches, workplace contaminants), and contributing factors (e.g. cigarette smoke, respiratory infections, indoor and outdoor air quality).⁶⁵ Primary prevention of asthma includes: reducing exposure in the workplace to airborne contaminants, reducing exposure to passive smoke both in utero and among young children, encouraging breastfeeding and delayed introduction of solid foods, decreasing exposure of young children to house dust mites, cockroaches, and moulds through regular cleaning and adequate ventilation, and decreasing the exposure of children who have a genetic predisposition to asthma to known sensitizers. The *Canadian Asthma Consensus Report* was released in 1999.⁶⁷ Concern has been expressed regarding the extent to which physicians currently follow guidelines.⁶⁵

Ministry Strategy

In conjunction with the release of the 2000 Chief Medical Officer of Health Report on asthma, the Ministry has been developing an Asthma Action Plan comprising the following three components:

- Health promotion and primary prevention
- Surveillance and research
- Clinical control and management

Work in CHCs will focus mainly on clinical control and management as well as health promotion and prevention.

CHC Practices

Responses from CHCs indicated that asthma education is primarily conducted on a one-on-one basis. Content is individualized to the needs of the client. If cost is a barrier, CHCs make medications and associated supplies available at little or no cost. Eligible clients are assisted with applications for funding for their medications. CHCs have had limited success with written care plans due to problems with literacy, linguistic diversity and lack of compliance. Clients are educated about self-care and the avoidance and prevention of triggers including smoking and second-hand smoke exposure.

One of the best practices' pilots is using asthma education as the topic. As the best practices initiative evolves, there should be an opportunity to develop and implement performance indicators for the management of this common, chronic disorder.

Diabetes

Diabetes is a complex chronic disorder with major short- and long-term health implications including heart attacks and strokes, vision loss, kidney failure, and limb amputation. The prevalence of diabetes increases with age affecting 3% of those aged 25 to 64 and 10% of those aged 65 and over.⁶⁸ Aboriginal populations have diabetes prevalences triple that of the general population. A substantial proportion of individuals are unaware they have diabetes and complications can already be present at the time of initial diagnosis.

Ministry Strategy

The Ministry's Diabetes Strategy was released in 1995⁶⁹ with an update in 1999.⁷⁰ The 1999 Report of the Chief Medical Officer of Health of Ontario complements the strategy by outlining a public health approach to this disease. The strategy outlines the current burden of diabetes with its impact on cardiovascular, kidney, nervous system, and eye complications. Without improvement in the detection, treatment and prevention of complications, the burden of disease would be expected to increase due to the aging population. Key features of the strategy are:

- reducing the amount of complications by 40-50% of retinopathy, nephropathy, and neuropathy
- achieve a more coordinated approach to diabetes care and education
- three levels of service identified are basic, intermediate and advanced which are to be linked through regional networks
- includes northern diabetes network and a southern Ontario Aboriginal initiative

At each level of service, items for patient care and management, education, research, program accountability and evaluation, and planning and coordination are described. CHCs are identified as possible sites for basic and intermediate levels of care.

Comprehensive guidelines for the management of diabetes in Canada were published in 1998.⁷¹ The central recommendation is that diabetes care be organized around an interdisciplinary diabetes care team which provides comprehensive, shared care. The practice guidelines contain several recommendations addressing screening, frequency and components of care, initial and ongoing education, and detection and management of complications.

CHC Practices

CHCs have developed comprehensive approaches that take advantage of their own staff skills in the area of patient education, nutrition and foot care. CHCs have developed flow

charts for the care of diabetic clients based on the latest Canadian guidelines. Some CHCs have developed their own group education programs for clients and their families to increase client skills in self-care such as blood sugar monitoring, calibration and use of glucometers, blood pressure monitoring, and health education (e.g. nutrition, physical activity). In some circumstances, CHCs utilize existing education programs for some of their clients but have created tailored education programs for those with specific language and learning needs. For example, one responding CHC worked with the local diabetes education centre, the Canadian Diabetes Association and the local community to develop a tailored program for the cultural and linguistic needs of a substantial proportion of their diabetes client population.

Specialists appear to be utilized as required and some CHCs have made special arrangements for on-site service delivery. Screening for gestational diabetes is routine. CHCs provide screening for high-risk groups as part of periodic examinations or at times, on an outreach basis. The presence of chiropodist staff facilitates ongoing foot care. CHCs have a variety of programs to encourage healthy eating and physical activity which clients with diabetes can be linked with. CHCs are involved with regional needs assessment and planning.

CHCs use their clinical case conferencing to discuss particular client management. One responding CHC reviews all clients with diabetes on a quarterly basis. Through this mechanism they identify opportunities for improving individual client management. There is an opportunity to take advantage of this work and develop indicators for success of the overall program (e.g. level of control of all of their diabetic clients). This experience will also be useful as best practice processes are developed for diabetes management.

One CHC manages a community-based diabetes education program in the former Regional Municipality of Ottawa Carleton. The program is delivered by certified diabetes educators comprised of three 2-hour sessions. Sessions are held during the day and evening and are held in five languages on a rotating basis. Concern was expressed regarding the sustainability of the program since no administrative support is provided and staff are seconded from six CHCs.

CHCs have made substantial efforts to incorporate recommendations for diabetes best practices. It will be important to facilitate the sharing of flow sheets and other approaches with all CHCs to avoid unnecessary duplication of efforts. Implementation of standardized performance measures for diabetes management and control would reduce the effort some CHCs are expending on doing manual chart audits and would facilitate the incorporation of more clinical performance measures in the CHC evaluation framework. Activities in this area should be coordinated with other developments within the Ministry such as Primary Care Networks (PCNs) reporting requirements and the evolution of the Diabetes Strategy.

Building Individual and Community Capacity

The health promotion actions of the Ottawa Charter (see Section II) are intended to improve the capacity of individuals and communities to improve their health. Building capacity has been a fundamental component of CHCs in Canada and elsewhere.⁷² Community capacity is the extent to which members of a community can work together effectively, and includes the ability to:

- develop and sustain strong relationships
- solve problems and make group decisions, and
- collaborate effectively to identify goals and get work done.⁷³

Capacity is related to assets (knowledge, experience, skills) as well as the ability to apply those assets to problems. CHCs provide services to increase skills and create a supportive environment for improved health. In some this is done through the development of leadership skills of residents. In one responding CHC, focus was placed on developing leadership skills in women in the community. The participants were found to later assume leadership or facilitation roles in other CHC initiatives or in new ventures in the community. One community was concerned with the noise and pollution from a nearby expressway. The CHC worked with residents and other community organizations to advocate for a noise barrier that has since been erected. The community is now pursuing advocating for wading pools. One CHC has identified that its vision is to have the children of their community become the future providers and managers of their centre. Active planning is ongoing to identify the key supports necessary for children to successfully travel through the career development lifecycle (preschool, primary school, high school, post-secondary).

Building capacity involves assisting clients and communities to address the determinants of health. CHC staff work extensively with community members to identify needs and develop and provide programming to meet those needs. The following sub-sections will address how CHCs modify the impact of other health determinants as well as the services intended for specific population groups.

Modifying the Effects of Health Determinants

Access Barriers

For many CHCs, low-income populations are the majority of their clients. This makes it difficult to purchase medications and services, afford transportation, and to acquire adequate food and housing. CHCs strive to address these access barriers in a variety of ways. Since not all medications are available through formulary or clients may not be eligible for Ontario Drug Benefits (ODB), CHCs make extensive use of free pharmaceutical samples, purchase commonly used medications in bulk, and will often have emergency medication funds available to subsidize fees for clients who are not

eligible for assistance. CHCs assist eligible clients to register for OHIP and some CHCs arrange for OHIP registration days so that clients can register with Ministry staff onsite. Arrangements are made with specialists and hospitals to cover fees for uninsured clients. Income barriers to access to dental care are substantial. Some CHCs make arrangements with dentists who are willing to provide services on a sliding fee scale or delayed payment plan.

When income is a barrier to coming to the centre, bus tickets and occasionally, taxis, are provided as necessary. In one community where a Head Start nursery school is provided to children with high needs, transportation is provided to get the children to the school. Where it is more feasible for staff to go to the clients, outreach clinics and services are provided in a variety of settings such as shelters and apartment buildings. In one location, staff provide services from a converted recreational vehicle so that they can travel to multiple sites where high needs populations (e.g. homeless) are located.

Housing Security and Homelessness

Housing issues are a substantial problem in urban settings. There are a variety of factors that contribute to this including mental health issues, being newcomers to Canada, and low income. CHCs assist clients in linking with housing workers who are often co-located within the CHC. Workers are active in attempting to prevent tenant eviction by helping residents meet their responsibilities, provide programming to address mental health issues, and prevent institutionalization. Many CHCs work with or develop tenant associations in public housing complexes to assist tenants to improve their local environment. In one instance, the CHC worked with other partners to develop a system which allowed tenants to swap residences to better match apartment size with needs.

Homelessness is at the far end of the spectrum of the housing crisis and some CHCs have substantial numbers of clients who are homeless. In addition to providing targeted services to this population, CHCs have been involved in multi-agency advocacy to encourage the implementation of comprehensive policies and strategies to address this situation.

Food Security

CHCs have a number of programs in place to address food security. These can include collective kitchen groups, community dining, community gardens, workshops on cooking and food preservation, bulk purchase of fruits and vegetables and linkage with food banks. In one location, the participants in the community gardens go to area farms and pick vegetables that were not harvested by mechanized equipment. These programs help low income families feed themselves, increase knowledge and skills regarding nutritionally sound food preparation, and improve cross-cultural understanding and cooperation. This latter benefit is the result of having gardeners, originally from different parts of the world, sharing their knowledge of different types of vegetables and gardening practices.

Access to Employment

Since housing and food access are linked to income which is in turn linked to employment, many CHCs, particularly those with strong social services linkages, provide programming to increase the opportunity for employment. These include computer access to job banks, workshops on job seeking strategies, and resume workshops. One CHC, in partnership with the community, provides a voice message box for clients without phones who are looking for work. Programming in some sites includes youth-specific initiatives such as alternative school programs, after-school homework assistance, and March/Christmas break programming. Volunteerism is a strong component of many CHCs which not only links the CHC with the community but also gives residents an opportunity to gain experience. Volunteerism is dealt with in more detail in the description of the CHC Program.

Work with Specific Population Groups

Immigrants and Refugees

Individuals new to Canada are not only from different countries but arrive under different circumstances. In particular, refugees can differ substantially in their health circumstances from those of immigrants. Immigrants receive health screening prior to their arrival whereas refugees usually do not. Immunizations as well as tuberculosis and other diseases,⁷⁴ need to be considered. Services need to address settlement issues, linguistic barriers and isolation. The evolution of comprehensive services in an Ontario CHC has been well described.⁷⁵

Large proportions of urban CHCs' populations are immigrants and refugees. CHCs strive to hire service providers who speak other languages. Cultural interpreters are used extensively during client visits, for phone calls, and to accompany clients on visits to specialists and hospitals. Written materials are also prepared in multiple languages. Special attention is made to the physical environment of the centres and publications to ensure that the facility is inviting to diverse cultural groups through the use of signage, posters, pictures and other materials.

There are a variety of settlement issues facing newcomers. Settlement counsellors and outreach workers assist clients with a broad range of concerns, (e.g. housing, clothing, food, social agencies, school registration, immigrant support groups, legal services, etc.). Substantial proportions of clients in some urban CHCs are uninsured. Assistance is provided to help clients register for OHIP for those who qualify. As previously described, special efforts are made to assist uninsured clients receive services. Many CHCs provide ESL classes in partnership with other agencies (e.g. Board of Education). Staff will often use the contact with ESL classes to provide information around health issues and availability of services.

Mental health issues are an important concern. A variety of strategies are used to address the mental health needs of clients including counselling, group programs, and

recreational activities. These are further described in the mental health section. Because isolation can be a significant concern, CHCs develop mutual support groups (e.g. Spanish-speaking women, East African women, etc.) and link newcomers to other people and services. One CHC has a twinning program where newcomers are linked with established Canadians who offer friendship, guidance, and an informal opportunity to practice English. The youth section describes CHC efforts to address the needs of newcomer youth.

Health examinations provided at CHCs include screening for tuberculosis (TB) and other diseases. Immunizations are brought up to date. Clients with active TB are usually jointly managed with specialist care at a local hospital and public health is responsible for providing directly observed therapy. Many CHCs have physicians on staffs that are able to perform the health examinations required for refugee applications.

Youth

Teens face a variety of issues as they mature. These include the development of healthy relationships including sexual health issues, the evolution of relationships with parents and others, the potential for conflict, and for newcomers, issues concerning social acclimatization. High risk/street-involved youth face a myriad of problems including sexually transmitted diseases (STDs), HIV, pregnancy, violence, drug and alcohol use, mental health issues, and problems with access to and continuity of services.⁷⁶

The responding CHCs, two of which focus specifically on youth, provide a broad range of youth services. There is a frequent absence of youth programming in the general population. CHCs partner with other agencies supplementing existing resources with additional grants and funding to increase the range of services available to youth. A common and key feature of CHC youth programming is the extensive involvement of youth in the planning and delivery of programming. A variety of strategies are utilized including clinical services, counselling, drop-in programs, youth leadership initiatives, group sessions, parent sessions, and community initiatives. Some CHCs are involved with alternative curriculum programs for students who have been removed from the mainstream education system.

CHCs have conducted community needs assessment to further define the specific issues affecting youth in their communities and to identify the necessary next steps. Efforts have been made to increase accessibility through the use of drop-in hours at clinics with an attempt to provide as many services as possible on-site. Sexual health services include counselling, treatment, condom dispensing, and sales of birth control pills. Some of the CHCs provide outreach clinical and counselling services in community sites including schools and shelters. For one CHC, this includes providing presentations and counselling in the youth detention centre and John Howard residence.

Drop-in programs provide a number of services including recreation, homework assistance, computer access, employment assistance, linkage with other CHC services, counselling, guest speakers, and debates/discussions. March and winter break

programming is a common feature. Group sessions are provided on such topics as anger management, depression and anxiety. Group sessions are also made available to parents with teenage children to help problem-solve some of the challenges they face. Group programming is provided for pregnant and parenting teens. Some of the CHCs have treatment groups for eating disorders. Community involvement is facilitated with co-op placements at the CHC, volunteerism, as well as projects to develop anti-violence campaigns, community theatre, and peer support. Some of the CHCs provide resources and classroom sessions for youth. Through these various strategies, CHCs are working to improve the skills of youth so that they may increase their chances of long term success.

Elderly

The elderly represent an increasing proportion of the population with the number of the oldest elderly increasing the most.⁷⁷ The prevalence of medical and disabling conditions increases as people get older. These include arthritis, dementia, heart problems, vision and hearing loss, respiratory and digestive problems. Hospital use rises dramatically with age. The elderly are the major consumers of home care services. Communities are increasingly faced with how best to support the elderly to maintain independent living in the community while addressing complex and multifactorial needs. The coordination and integration of multidisciplinary health and social services has been recommended as an approach to improving the care and maintaining the independence of the elderly.⁷⁸

Falls are a major problem for the elderly since they can lead to fractures, hospitalization and loss of independence.⁷⁹ However there is good evidence that multidisciplinary post-fall assessment teams can significantly reduce subsequent falls in the elderly.⁸⁰ Within CHCs, seniors who have fallen, are assessed by primary care providers who can call upon other CHC staff to perform specific assessments. For example, in one responding CHC the occupational therapist (OT) will undertake an in-home safety assessment and assess potential contributors to the fall. Home assessment visits may be performed by other types of staff in other CHCs. The CHC also involves a pharmacist who screens medications which could contribute to falls and makes recommendations, where possible, to reduce fall recurrence. Providers encourage their clients to bring all their medications on each visit for review.

Muscle strength and maintenance of coordination and balance are important contributors to fall prevention and independent functioning. CHCs encourage physical activity of seniors through a variety of mechanisms including seniors' fitness classes, training of seniors to provide peer-led fitness sessions, and community walks and events. In one CHC, particular attention is made to those who are extremely frail by providing transportation to programming with support from a multi-disciplinary team. CHCs also work with other community agencies to improve access to physical activity programs suited to seniors, (e.g. Tai Chi, outdoor walks). Hearing and vision testing are performed through routine annual physical examinations. Foot care is an important component and many CHCs (22) have chiropodists on staff. Nurses have frequently taken foot courses so that they can provide preliminary levels of care.

CHCs strive to make services more accessible to the elderly through a variety of mechanisms. These include performing home visits, having physically accessible sites, and providing outreach services such as drop-in clinics and nutrition/health education services at senior apartment buildings.

CHC programming supports seniors in overcoming social isolation in a variety of ways. One responding CHC uses an extensive range of group programming for frail elderly, elderly dealing with bereavement, adult day program, walking and other exercise groups and health education workshops. Other CHCs work with tenant associations to encourage and sustain social support networks in senior apartment buildings or encourage linkage with existing senior community and recreation programming.

Since seniors may require services from a variety of providers and agencies, CHCs have case conferences on a regular basis. For CHCs with extremely high needs clients, these mechanisms are more formalized. There is close involvement with CCAC, geriatric assessment programs, and senior mental health workers to coordinate care. In many CHCs, CCAC case managers are on-site at the CHC or have some office hours and participate in team meetings to discuss case management.

CHCs also participate in planning/advocacy efforts specific to seniors' needs. Some offer unique services which address addiction, problem gambling, or continence. Working with other agencies and seniors' groups, CHCs advocate for greater awareness of seniors' issues such as winter sidewalk safety, safer street crossings and community problem solving in seniors' buildings.

CHC Services and the Population Health Promotion Framework

The preceding section outlined a framework which describes quite well the characteristics of CHC services. They blend a health determinants' approaches, health promotion actions, and working with several levels of society (primarily individuals, families and communities). In addition to individual-based services, CHCs make extensive use of group and community programming (Table 4).

Table 4 - Examples of CHC Group and Community Programming

Group Programming	Community Programming
- parent support group - breastfeeding support - childbirth preparation - bike safety - senior drop-in - senior recreation - stress management - self-esteem - anger management - walking program	- farm safety - advocacy – industrial pollution, air quality - coalition for lesbian, gay, bisexual youth - school snack program - violence prevention, community justice, conflict resolution - employment search services

- nutrition workshops - smoking cessation - after school home work - youth summer program - diabetes education - babysitting courses	- legal education - community kitchen, gardens - peer active leadership - self-help groups - ESL preparation - Youth theatre - Women's support group
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These programs supplement and support the interventions delivered by the primary care service providers. For example, a NP can recognize that there are several young men who are having difficulty with anger and can arrange with the social worker or mental health counsellor for them to attend a series of anger management workshops. Likewise, the youth worker who is working with female youth at a drop-in centre can bring in the physician to provide more information and linkage with birth control services.

The Population Health Promotion Framework cube functions as a collection of smaller cubes representing an element of each of the dimensions. The following table provides some examples of these smaller cubes with CHC practice examples.

Table 5 - Population Health Promotion Cubes and Examples of CHC Programs

Health Determinants	Health Promotion Action	Sector	CHC Program Example
Healthy Child Development	Develop Personal Skills	Individual, Family, Community	Better Beginnings, Better Futures
Physical environment – housing	Build Healthy Public Policy	Community	Advocacy for action on homeless crisis
Physical environment – Contamination	Strengthen Community Action	Community	Lead contaminated soil
Health Services, Coping Skills	Strengthen Community Action	Community	Needle exchange
Health Services	Reorient Health Services	Individual	Youth Drop-in/Outreach Clinic Services
Personal Health Practices	Develop Personal Skills	Individual	Smoking Cessation Classes
Health Services	Reorient Health Services	Individual, Family	Diabetes education program

The above examples are not intended to be exhaustive but illustrative. Debating whether a particular activity falls more within one box or another is also not a useful exercise. What is important is that CHCs have unique capacity to take a comprehensive approach

to health issues through a combination of individual, group and community activities and interventions.

Summary

CHCs, as primary care organizations, exhibit the characteristics as described in the definitions by PCCCAR and the IOM. The IOM's key attributes of primary care include: accessibility, comprehensiveness, coordination, continuity of services, accountability, and attention to the needs of a specific community through specific health programs and services. The range and content of programming as reflected by the responses to the health condition questionnaires as well as the site visits indicates that CHCs are effectively addressing these key attributes. The needs of CHC client populations extend beyond direct primary health care services. CHCs use a variety of strategies including outreach, home visiting, delivery of additional on-site services, and partnership with other service agencies to provide more comprehensive services. Service integration and case coordination are important service components particularly when clients have a mixture of needs.

CHCs are extensively involved in improving the capacity of individuals and communities. This includes minimizing the impacts of poverty in accessing health services; improving language and employment skills; finding, maintaining and improving shelter; increasing access to nutritious foods; supporting healthy child development; and increasing community involvement and leadership. While there has been much discussion and recognition of the importance of health determinants over the past several years, CHCs actively demonstrate a comprehensive population health approach to service delivery.

SECTION III: CHCS AS A DELIVERY MODEL WITHIN PRIMARY CARE REFORM

Primary Care in Other Jurisdictions

The experience in other parts of Canada as well as other countries may be of relevance to decision-making regarding the CHC Program in Ontario. A review of documents and/or interviews were conducted for a variety of jurisdictions. Semi-structured interviews were conducted using the questions shown in Appendix 4 as a starting point. A list of those interviewed is also included in the appendix.

British Columbia

Health services, other than MD fees, were regionalized eight years ago. A variety of models are being piloted some with alternative funding mechanisms. The government has announced that it intends to establish CHCs in the lower mainland to provide primary medical care, mental health services, alcohol and drug counselling, hospice services, TB

services, and infectious disease services.⁸¹ The Vancouver/Richmond Health Board is looking at having a CHC in each of their 7 regions.

Alberta

There are three CHCs in Alberta which provide services to high risk populations and are governed by community boards. Funded by the Regional Health Authorities on a global budget basis, the CHCs are involved in discussions for the creation of performance indicators for the primary health care system. Funding from a variety of sources is increasing the range of mental health and social services that are provided through CHCs. Regional Health Authorities are looking at creating CHC-like models to deliver primary care services to certain population groups or geographic areas. Other models of service delivery are being utilized as well. For example the "8 and 8" health centre in Calgary provides urgent, walk-in care on a 24/7 basis but also has on-site home care, mental health and public health services.

Saskatchewan

Primary services in Saskatchewan are delivered primarily out of family physician offices. There are five CHCs in Saskatchewan called "Community Clinics." Public health departments provide all immunizations and include some type of well-baby checks at the time of these visits. Public health nurses run these clinics. Health services other than primary care were regionalized in the early 1990s. The Community Clinics continue to be directly funded by the provincial department of health on a global budget basis. Many of the Community Clinics developed as a response to the doctors' strike in 1962 and were set up as a means of safeguarding access to care at that time; only more recently have they begun to focus on high needs populations. Social services are not part of the delivery model. New strategies and initiatives go through the Health Districts which then decide how to deliver the services. Some of the Clinics are quite large. For example the Saskatoon Community Clinic has 14 FTE physicians with 29,000 registered clients. The Clinic offers counselling services, nutritionist, PT/OT, optometrist, and an on-site pharmacy. The Clinic uses satellite delivery sites for specific population groups (e.g. aboriginal). The report of the Fyke Commission on Medicare was recently released.⁸² It recommends that primary interdisciplinary health service teams be created. These teams will be integrated into a Primary Health Network managed and funded by health districts and will include enhanced community and emergency services. The role and future of Community Clinics are not directly addressed in the report.

Manitoba

Health services are regionalized with Winnipeg being the largest region. CHCs were devolved to the regional health authorities (RHA). The RHAs are grappling with the issue of their role in primary care delivery. No specific policy framework has been released from Manitoba Health to guide them in this area. The Winnipeg RHA is in the process of conceptualizing local access centres that would be located in each of 12 parts of the region. The centres would provide primary care to high needs populations but also act as

an access centre for a wide range of health and social services (family services) including public health, community mental health, and home care. The access centres would be expected to be referral centres and work collegially with other primary care practitioners in their geographic area. A variety of developmental issues need to be addressed including: community buy-in and participation, choosing sites for centres, use of main and satellite sites, management structures, governance, etc. This framework is being developed collaboratively between the Winnipeg RHA and Manitoba Health. Current planning is using a staff ratio of two MDs to one NP. It is expected that other initiatives would be linked to these centres over time.

Quebec

Quebec has a regional structure of 146 CLSCs throughout the province. The population of each region varies between 15,000 to 130,000. A full range of health and social services are delivered through CLSCs. About 22% of provincial GPs work in CLSCs and are paid on a salary basis. NPs and SWs are used extensively, particularly as first line staff. The NPs handle triage of walk-in clients, and do a substantial proportion of prenatal and postnatal visits and management of stable chronic diseases. Because CLSCs deliver home care services and most social services on a regional basis, CLSCs have substantial numbers of RNs and SWs on staff.

The fact that CLSCs are located throughout the province and deliver a wide range of services means that CLSCs provide services for everyone. Because of their inter-disciplinary staffing, there is a greater proportion of more vulnerable populations seen by primary care providers. The Claire Commission recently reported on the review of the delivery of health and social services.^{83,84} The commission recommended that CLSCs will provide staff (e.g. NP) to family medicine groups to increase inter-disciplinary services outside of CLSCs and to improve service coordination between CLSCs and GPs. The plan is for a network of front line health and social services to be built from the current reality of CLSCs and physician offices. The delivery of front line social services are to be the responsibility of CLSCs with the minimal services to be delivered to be specified. CLSCs are to be responsible for offering psychosocial services to the population base of their territory including vulnerable populations. CLSCs will also be responsible for coordinating health, psychosocial and intersectoral services for children and are to work with their partners to deliver a range of children's services. CLSCs, in collaboration with family physician groups, are to be responsible for integrated services for the elderly whose independence is challenged. Several media releases by the Association of CLSCs since January 2001 have pointed out the need for increased funding if CLSCs are to take on these roles.

New Brunswick

There are two pilot CHCs in New Brunswick, one rural and one inner-city. The inner-city centre is linked to the regional hospital board which provides the physical site, support services and some staffing (senior nurse and 0.5 FTE dietician). The centre does not yet

have a MD on staff, so the three RNs on staff have developed collaborative relationships with local MDs. Following a community round table process involving local and provincial politicians, industry, and health sector representatives, they have requested additional funds to expand staff to include 3 MDs and additional nurses. In their review of CHCs in Canada, they did not find any specific staffing model. They have a SW on staff. They currently double their funding through receipt of funds from other programs and grants (youth programming worker, poverty worker, project staff). There has not been a provincial decision yet. A provincial advisory committee to the Minister is expected to report shortly on recommendations for health services in New Brunswick.

PEI

Health services are regionalized in this province. Two CHCs were developed starting in 1995 and predominantly provided group interventions. The implementation of primary care services is currently being initiated.

United States

There are over 600 CHCs in the United States. The US General Accounting Office recently released a report to Congress on the status of CHCs.⁸⁵ In their report, they observed that CHCs have been a stable source of care for underserved people in urban and rural areas. Over time, the CHCs are operating more sites and serving more patients. On average, each CHC operates out of 5 sites. Patients are predominantly from vulnerable populations, many of which lack health insurance. Recent evaluations have reported that CHCs have improved access to appropriate and timely health care services for these populations. About half of the clinical providers are physicians with the remainder including NPs, physician assistants and nurse-midwives. There has been a gradual shift from federal grants to Medicaid payments. The growth of Medicaid managed care programs (capitated payments) has reduced revenue for CHCs in some states but co-payments are required to ensure adequate payment for CHC high needs clients. Federal grants are primarily for those that are uninsured and those living in poverty. CHCs that have developed partnerships with other provider organizations (e.g. hospitals) as well as strategies to attract patients with diverse payment sources have increased financial viability. Overall recommendations included improving the monitoring process and oversight tools especially data collection efforts. The report also recommended a best practices program to allow CHCs to learn from one another's successes and implement proven solutions.

Sweden

Sweden's health system has some similarities with that of Canada although there are several key differences.^{86,87,88} Service is provided through Primary Health Care Centres staffed with 3-5 salaried physicians and district health nurses (a partial mix of our public health nurses and nurse practitioners). Sometimes there are physiotherapists, pediatricians, OB/Gyn and psychiatrists on staff. Midwives are full partners in providing most prenatal and delivery care although there are separate community and hospital-

based midwives. There are 900 health centres in the country with an average of 10,000 people per centre. Funding is provided through county councils although in some cases this is managed through a private organization. Child and maternal health clinics provide free services for pregnant women and children up to age seven. Clinics have been in place for several decades. District midwives and nurse nurses, respectively, run these clinics supported by GPs. While there are more physicians per capita in Sweden than Ontario, only about 20% of Swedish physicians are in general practice. The common role of primary care as a gatekeeper does not exist since patients do not usually require a referral to obtain specialist hospital care. User fees are the norm with ceilings in place.

The Swedish government recently released a report on primary care reform.⁸⁹ They observe that primary care varies considerably throughout the country in organization and content. Integration of primary care into county councils is such that "the health centre concept has lost its meaning." There is a general shortage of GPs which is likely to get worse due to inadequate numbers being trained and the current proportion of older GPs. The report identifies that clearly defined objectives for primary care are needed. It concludes that "well-established hospital care has come to constitute the base and that primary care has adapted accordingly."

England

England has been making substantial reforms to their health care system for several decades. Single GPs formed group practices of four or more GPs in the 1970s. A district or public health nurse might be attached to the group practice but was not generally regarded as part of the team. Over time and with the development of fundholding by GPs for a range of services, expansion of the primary care team occurred. It has been observed that lower socio-economic groups have higher visit rates but there has been no increase in resources in most places. GPs are now parts of large groups called Primary Care Groups (PCGs) which provide care for populations of up to 250,000. Each PCG is required to develop a program which targets high-risk groups in their area including specific patient groups (e.g. diabetics, elderly, children). The PCGs are in the process of taking over responsibility for providing/funding hospital and social care and will become Primary Care Trusts. The Trusts are funded on a program basis with the GPs funded primarily through a capitation system. Staffing is multi-disciplinary with NPs, PT/OT, SW, public health nurse and other community nurses. Increasingly, services which would have been delivered in hospitals are being delivered by these staff on an out-patient basis. The PCG/PCT has a management board made up of community representatives and health professionals. The three main functions of PCG's are: to improve the health of, and address health inequalities in their communities; to develop primary care and community services across the PCG; and to advise on, or commission directly, a range of hospital services for patients within their area that appropriately meet patient needs. The PCGs will be responsible for the implementation of a comprehensive clinical governance program. Clinical governance focuses on a comprehensive program of continuous quality improvement. It includes processes for monitoring care and external review, policies for managing risk and clear lines of responsibility and accountability. It has moved the emphasis from the cost of healthcare to the quality of clinical practice.

In the UK, there are an average 2.3 FTE practice staff per GP. Of these, 16.9% are practice nurses, 3% provide direct patient care and 79% are administrative and clerical.⁹⁰ Community/district nurses are attached to GP offices and will provide home care-type services (e.g. dressings, suture removal, leg ulcer care, injections, continence, etc.). The health visitor are also attached to GP offices and are more like a public health nurse providing immunizations, general health education and health promotion to all ages. The practice nurse is employed by the GP to provide screening tests, advice, carry out some procedures (injections, dressings) and is involved in prevention and chronic disease management with the GP. Bigger practices allow a greater range of staff to be employed. For example in one practice with 4 GPs, there are 3 NPs, a physiotherapist, occupational therapist, social worker and the public health and community-based nurses. The NPs run various services such as community psychiatric care, asthma, diabetic, and cardiac services.

The UK is instituting a new plan for primary care in which they intend to introduce electronic medical records, adding more GPs, adding primary care and community mental health workers, creating GP specialists, and increasing the roles of nurses.⁹¹ They are also planning to introduce "GP specialists" so that GPs may role substitute for specialists in areas such as cardiac investigations, dermatology, endoscopy and cystoscopy.

Implications for Ontario CHCs

Primary care reform is occurring everywhere. The history and context is different in each jurisdiction and the role of CHCs is highly dependent upon the context of the organization and delivery of health services overall. The concept of regionalization is pervasive and primary care is being incorporated into regional models. The concept of CHCs being used regionally was fully implemented in Quebec in the 1970s and 1980s and is now beginning to be considered in some other locations (e.g. Vancouver, Winnipeg). In Quebec, the involvement of CLSCs in providing health and social services is being strengthened. The use of nurses in role substitution for some of the tasks of physicians is also pervasive, particularly for maternal/infant care, triage in urgent care, and the management of chronic diseases. In Manitoba, the use of CHCs to deliver primary care services to specific populations and broader health and social services to a broader population is being planned. Incorporating social services with primary health services is a common theme in many other areas. By comparison, Ontario's recent administrative decentralisation of major health services (hospitals, long-term care and mental health) does not include programs with more specialised focus like AIDS, Health Promotion, CHCs, Public Health, emergency health, midwifery and hospital priority programs. As well, the absence of a province-wide network of CHCs hinders the ability to include CHCs on a consistent basis in planning health services within the regions.

Primary Care Reform in Ontario

There have been many reports addressing the reform of the primary health care system over a period of many years. These have included reports from PCCCAR in 1996,⁷ and both the OCFP³⁶ and the HSRC⁶ in 1999. Common themes from these reports have included:

- enrolment of patients
- providing services 24 hours a day, seven days a week
- funding mechanisms other than fee-for-service (FFS)
- defined minimum set of services
- coordination of care
- methods for quality improvement
- use of information technology.

The government has adopted the following goals for primary health care reform: to improve access; improve quality and continuity of care; increase patient and provider satisfaction with the health care system; and to increase cost-effectiveness of the services.⁹² In 1998, the Ministry and the OMA jointly initiated primary care reform pilot projects. In common with previous recommendations, the pilot sites will have enrolment of patients, population-based funding of services, improved access, and coordination and continuity of services.⁹³ Currently there are 13 signed PCN agreements and the number is expected to increase. Providers are expected to provide some evening and weekend coverage.

Telephone-based health information and triage is a component of primary care reform. A Telehealth Task Force reported on the required standards, policies and infrastructure for such a service in October 1999.⁹⁴ Pilot sites are required to have a telephone health advisory service (THAS) that is staffed by nurses to provide health information advice as well as telephone triage, directing callers to the most appropriate care option, (i.e. see physician the next day, the on-call network physician, local emergency department, or other services).⁹⁵ The MD is on call to THAS. The CHC Program has been interested in implementing a THAS system since 1998 but this has not been funded to-date. A new 24 hour/7 day a week telephone health information service was launched in February 2001 for those living in the greater Toronto area⁹⁶ and is projected to be expanded across the province by the end of 2001.

The current pilot site agreements do not specifically address interdisciplinary provider groups although roster sizes may be increased with the presence of a NP. The announcement of the creation of the Ontario Family Health Network to oversee the addition of new, voluntary networks across the province highlights the role of nurses and other health care providers, including nutritionists.⁹⁷ The government is targeting a voluntary enrolment of 80% of family doctors practicing within PCNs by 2004. It is not clear the degree to which non-MD providers will actually be involved in service delivery within PCNs.

The Ministry's overall vision of primary care reform is that variability and flexibility need to be allowed for in order to achieve improved access and comprehensive care in

each community and setting in the province.⁹⁸ While there is no one single payment/organizational model that is intended or expected to work everywhere, based upon the government's expected uptake of PCNs over the next few years, PCNs or entities which evolve from them are expected to become the dominant primary care delivery model. In addition to the PCNs, the Ministry identifies four other delivery models: Health Service Organizations (HSOs), CHCs, Community Sponsored Contracts (CSCs), and Northern Group Funded Plans (NGFPs). These latter two models will be discussed in greater detail later in this Section.

Role of CHCs in Primary Care Reform

CHCs provide comprehensive and integrated primary care services to high needs and under-served populations. The intention to reform the current FFS environment does not alter the need for CHCs. CHCs are an important component in the overall delivery of primary health care services. There will be a continued need for an organization to comprehensively address the health needs of higher risk populations. For a variety of reasons, including language, poverty, disease status, geographic isolation and insurance status, these populations have difficulty accessing services. With the intended enrolment of most individuals in the province with some form of primary care provider organization, there will be a particular need for CHCs to be able to provide services for difficult to enrol populations. These populations are currently either difficult or ineligible to register for OHIP benefits and enrolment would require even greater commitment (e.g. fixed address, attend the same location for service). In rural and northern settings, CHCs provide comprehensive services to previously under-served communities. With respect to the goals of primary care reform, CHCs improve access to primary care by improving co-ordination of care, improve access in areas of relative geographic undersupply and provide on-call coverage to their clients on a 24/7 basis. They improve the quality and continuity of care by enhancing the involvement and appropriate role of MDs and other primary care providers.

If one examines the various primary care reform reports, the characteristics recommended are for the most part already part of the CHC model. Whether this is the use of interdisciplinary staff, MD remuneration other than FFS, 24/7 service provision, or coordination of care, these are being provided by CHCs today. While it has been recommended that primary care groups should eventually have some form of community governance or input, this is already a key aspect of CHCs. The importance of considering the broad range of health determinants has been repeatedly emphasized in the planning and delivery of health services. This review has shown that CHCs take such an approach in their work. CHCs have the additional advantage of providing the infrastructure from which to deliver other health and social services to a broad population base. This is fully realized in Quebec's CLSCs where expansion of their responsibilities for health and social services has been recommended.

In Ontario, the Ministry intends to reform the primary care system by having 80% of family physicians practising in primary care networks. This initiative is focused primarily

on reforming fee-for-service payment system to an alternate system that includes capitation. This is a significant change, but is still just a step in the evolution of primary care reform in Ontario. To fulfill the vision and intent of the many reports on reform, a reformed primary care system would result in the creation of entities with characteristics similar to CHCs. In addition to meeting a clear and continuing need, CHCs offer the experience of having implemented many of the components of primary care reform that may be contemplated for the primary health care system in the future. For the near term, primary care will be delivered through several different mechanisms – e.g. fee-for-service, CHCs, community sponsored contracts, primary care networks, northern group funding plan. Care must be taken to ensure that the various approaches to primary care, including CHCs with a their focus on populations with access barriers, operate within a consistent set of expectations.

Alignment of CHCs with Primary Care Reform

There are some specific aspects of the primary care reform initiative which require attention to ensure alignment of the CHC Program.

Defined List of Services

Primary care reform recommendations include a defined list of services that organizations are expected to provide. While CHCs have typically provided a broad set of services to their client populations, the Program currently has no defined list of required services. The PCCCAR list of services is a starting point for consultation with CHCs to confirm the most appropriate list for the CHC setting.

Required Hours of Service

Current PCN agreements require weekday evening and weekend office hours. Required number of hours of access have not yet been determined. CHC primary care provider staff complements are relatively small by PCN standards (only 17 CHCs have five or more MDs and NPs), which impede provision of extended hours of service and on-call rotations. CHCs have an MD on call on a 24/7 basis. While the majority (~90%) of CHCs provide some scheduled weekday evening clinic hours, only a few provide services to 9 PM on weekday evenings. A minority (~30%) of CHCs provide scheduled office hours on weekends. Considering that a central purpose of CHCs is to increase access, there is a need for CHCs to provide more weekend and evening services. The small size of the MD and NP staff complements in some CHCs is a substantial barrier to providing extended hours of operation. Staff complements will need to be taken into consideration in setting service expectations.

Client Registration and Enrolment

A common theme of primary care reform models is the enrolment of clients to the service delivery organization. The clients who enrol in PCNs are essentially agreeing to receive

their medical/nursing services from that particular provider/organization. Enrolment is intended to enhance the continuity and coordination of care.

CHCs register clients who use any primary care services, not solely services delivered by physicians and nurse practitioners (e.g. social work services, chiropody, nutrition counselling). Many of the population groups (e.g. transient, homeless, street-involved individuals, mentally ill, uninsured) served by CHCs have significant barriers to enrolment. This aspect is one reason for the continued need for CHCs. However, CHCs should continue to register clients wherever possible since this gives them information upon which to plan and deliver programs and better meet the needs of the population served. The CHC Program should ensure that CHCs use consistent criteria for determining which clients should be registered.

Once primary care reform has advanced to include most of the province, CHCs will need to identify those registered clients who use the CHC as their primary source of medical/nursing care. CHCs, primary care networks and other primary care providers will then need to address the issue of enrolment in more than one organisation.

Recommendation 1: Role of CHCs in Primary Care in Ontario

Recommendation:

The Ministry should ensure that CHCs play a strategic role in primary care reform for populations with barriers to access to care based on the following key Program strengths:

- **interdisciplinary team-based care that makes appropriate use of a broad range of health professions**
- **flexible service approaches that respond to population health needs**
- **programs that build community capacity to address broader health determinants**
- **accountability to communities served through community board governance and accreditation**
- **partnerships with other community stakeholders in needs assessment, as well as the design, delivery and evaluation of services**
- **an infrastructure that supports integration of primary care with the delivery of other health and social services**

Review findings that support this recommendation:

- CHCs meet many of the objectives of primary care reform;
- CHCs take comprehensive approaches to meet the needs of populations facing access barriers including disadvantaged populations in urban settings and geographically dispersed populations in northern rural and under-served areas;
- CHCs provide comprehensive services that effectively address the key attributes of primary care (accessibility, comprehensiveness, coordination, continuity of

services, accountability, and attention to the needs of a specific community through specific health programs and services);

- The development of PCNs is not designed to improve the access to services of these key population groups;
- Compared with other primary health care delivery models in Ontario, CHCs have the broadest range of accountability mechanisms in place;
- CHCs provide an infrastructure from which other health and social services can be provided to a broad population base (this concept is being utilized in other jurisdictions such as Quebec and Manitoba);
- CHCs demonstrate strong collaboration among a broad range of health professions and a capacity to build partnerships with other community agencies.

Implementation of the recommendation requires:

- The Ministry ensure that existing CHCs have the resources necessary to enable them to play their identified role in the delivery of primary care services to populations facing access barriers.
- The Ministry fund a province-wide network of CHCs across the province in areas of greatest need.
- The Ministry to include CHCs in Telehealth initiatives.
- The Ministry build upon the Program's strengths and address current limitations as outlined in this report and subsequent recommendations.

Recommendation 2: Defined Range of Services and Required Hours of Service

Recommendation:

The CHC Program should require CHCs to provide a defined range of services and to provide scheduled primary care services on weekday evenings and weekends.

Review findings that support this recommendation:

- Primary care reform includes service components not fully in place in CHCs: list of defined set of services, weekday evening and weekend office hours;
- CHCs provide comprehensive primary care services including most of the services outlined in PCCCAR however funding is not tied to a list of defined services;
- CHCs have an MD on call on a 24/7 basis [most (~90%) provide some weekday evening hours but a minority (~30%) provide week-end office hours].

Implementation of the recommendation requires:

- CHC Program work with CHCs to define a list of services that CHCs will be required to provide.

- CHC Program require CHCs to provide a defined number of office hours for physicians/nurse practitioners including weekday evenings and weekends.
- CHC Program provide appropriate and adequate staffing and operating funds for the provision of weekday evening and weekend services.

Recommendation 3: Client Registration and Enrolment

Recommendation:

The CHC Program develop consistent criteria for determining which clients should be registered with the CHC as active clients.

Review findings that support this recommendation:

- Client enrolment is a common theme for primary care reform;
- CHC clients are currently registered with the CHC based on their utilisation of any clinical services;
- There will be a need for enrolment when PCNs have become a dominant delivery model;
- A proportion of clients, larger in urban areas, will not be enrollable due to the transient nature of their living arrangements.

Implementation of the recommendation requires:

- Observing the pace of implementation of PCNs (the greater the uptake of PCNs, the greater the need for CHCs to have enrolment).
- Develop criteria for registration and estimate the proportion of non-registered clients by CHC.

Salary Scale and Staff Retention

With the exception of NPs, there have been no salary adjustments for CHC staff since 1992. This has had negative effects on staff moral and made recruitment and retention of staff more difficult. Based upon comparisons of CHC pay rates and those of comparable organizations, Hay Consultants found that CHC staff pay was substantially lower than the market median. Depending upon the position, pay rates were 1-21% below market median rates for most positions although three positions were slightly above market median by 4-6%.

At present, CHCs hire almost one half of all nurse practitioners. Along with the physicians, they form the core provider group of the primary health care team. The demand for NPs has been increasing, as there are positions available in hospital emergency rooms, special hospital programs, CCACs, voluntary health organizations and expanded CHCs. If more funding for NP positions was provided by the Ministry in these or other settings such as PCNs, then the present output of 75 NPs a year will not be adequate to meet demand and there would be greater competition. The AOHC's submission for CHC expansion would involve hiring an additional 412 NPs over the next several years in addition to the 118 currently employed.⁹⁹ In site visits, NP pay was not generally viewed as a problem, although some concern was expressed that some northern hospitals pay \$10,000 a year more. There are some unique issues for recruitment and retention of NPs as identified by the AOHC's Rural and Northern Network in their Nurse Practitioner Project.¹⁰⁰ These are health system-wide issues that are not unique to CHCs. These include issues related to role definition, excessive workload, inadequate educational/training preparation to meet the challenges of northern and remote primary care work as an independent practitioner, and physician replacement role because of lack of MD resources.

Considering the emergence of other settings which would likely employ NPs, CHCs may experience greater challenges in recruiting and retaining NPs.

The Hay Group performed a review of CHC salaries in 1999 on behalf of the AOHC and the Ministry.¹⁰¹ They found that salary ranges are below market median for the majority of CHC jobs. They estimated that the new recommended salary ranges would have up to a 6.2% impact on payroll (\$2.4 million). They also noted that benefit costs are increasing due to increased Canadian Pension Plan contributions as well as medical/dental plans. Ministry calculations taking into consideration benefits' costs and the impact of reclassifications estimate a total cost of \$4.5 million. The Hay Group was unable to recommend on call/call in practices and recommended that a separate process address this.

Supply and Distribution of Physicians in Ontario

As of December 2000, there were 33 northern communities and 74 southern communities designated as underserved, requiring 103 and 353 general/family practitioners respectively (MOH & Long Term Care, North Region, Health Care Program). A PCCCAR report summarizes the factors affecting provider distribution:¹⁰²

- Personal and social isolation
- Professional isolation: lack of physician back-up and consultation
- Few opportunities for spousal employment
- Discomfort in a rural setting due to lack of exposure/training in non-urban setting
- Lack of access to hospitals and other support services
- Lack of educational opportunities for children and spouse
- Demand of practice: on-call responsibilities, workload
- Lack of access to continuing education

- Lack of replacement for leaves of absence (locums)
- Lack of cultural and recreational opportunities
- Quality of physical environment
- Lack of specialist consultation
- Distance from extended family
- Lack of opportunities for career advancement.

The above factors are generic and will pertain to all health professions. The McKendry Report outlines the various issues affecting physician supply and distribution.¹⁰³ The main points of the report are:

- the current supply of physicians and physician services is not sufficient to meet the health care needs of Ontarians
- the uneven distribution of physicians is more problematic than the overall lack of physicians
- long-standing difficulties of remote northern communities in recruiting and retaining physicians is also being felt in small and medium sized communities as well as rural areas in southern, central and eastern Ontario
- absolute number of underserved areas in these southern areas is greater than in the north
- recommendations included the effective use of recruitment/retention initiatives as well as strengthening the underserved area program

Difficulties with recruitment and retention of physicians, particularly for rural and remote areas are not unique to Ontario or Canada.¹⁰⁴ All across the country, there has been a predicted shortage of physicians. To turn the tide, medical schools are enrolling more students, training positions to qualify international medical graduates for licensing have increased, and fast-tracking the licensing for certain classes of physicians has been implemented. Ontario recently announced plans for a northern-based medical school.¹⁰⁵ A number of provinces (Manitoba, British Columbia) are offering bonuses to physicians signing contracts to work in underserved areas and are also providing bonuses if they stay for set periods (3-20 years). Ontario also offers generous compensation packages for rural and northern areas through CSCs and NGFPs (described below). Both models provide physician payments through non-fee-for-service mechanisms.

Community Sponsored Contracts (CSC): This program provides a guaranteed salary to a physician in eligible communities in Northern Ontario which have been designated as underserved and require a complement of one or two physicians. Physician remuneration ranges between \$174,000 and \$194,000 per year. In communities without a hospital, \$30,000 annually is available for providing after hours on-call service subject to local agreement – either through a hospital emergency room or through discussion. In communities with a hospital, a \$70 per hour sessional fee may be available for night and weekend emergency department coverage. Contracts are for one, two or three-year terms. Two and three-year contracts have a completion bonus of \$10,000 and \$25,000 respectively. Physicians will have access to replacement physicians for up to 37 days

leave per year and maternity leave benefits for up to 17 weeks at 50% salary. There are 24 eligible communities and 23 have been taken up.

Northern Group Funding Plan (NGFP): This program is intended for groups of three to seven family physicians in eligible northern communities more than 80 km from a major centre and with a population less than 10,000. The contract provides for a global payment to a group of physicians, and ensures that patients will receive a wide range of comprehensive primary care services. The contract contains several benefits for the physicians including a guaranteed annual remuneration of \$128,000, \$60,000 annually for overhead costs, additional payments for more specialized services such as minor surgery, obstetrical deliveries, and anaesthesia at \$5,000 per year each; surgical assists at \$2500 per year, plus billing at a \$70 per hour sessional fee for night and weekend emergency department coverage. Physicians will have access to replacement physicians for up to 37 days leave per year and maternity leave benefits for up to 17 weeks pay at the rate of \$124,000 per year. A retention incentive payment of \$10,000 is paid after three years of continuous service. There are 18 eligible communities of which 13 have been taken up.

Community Health Centres: Centres pay MDs on a salary basis with the range based on location. In under-serviced areas, the range is \$117,766 to \$135,830 and in other areas the range is \$80,295 to \$117,766. In addition to these amounts, CHCs receive an allowance of \$5,350 per FTE physician to support on-call arrangements. Due to differences in availability of MDs to cover on-call requirements, the frequency of being on-call varies substantially between CHCs although all get paid the same stipend. Annual leave of 3-5 weeks is provided depending upon length of service and another two weeks of paid professional development time is provided. There are maternity, sick leave, and other benefits.

Physicians are attracted to practice in CHCs for a number of reasons: philosophically they like the values and principal espoused by the CHC, such as team work, emphasis on prevention and health promotion, holistic approach and availability of other health care workers such as nurse practitioners, social worker, health promoter, nutritionist, etc. They also appreciate that they do not have to worry about managing the day-to-day operation of the clinic and are provided with paid vacation, 2 weeks education leave and a benefits package.

CHCs are not able to match some types of incentives offered to physicians from local municipalities, hospitals and other community organizations such as signing bonuses, housing, leased automobiles and other incentives. Due to the limited number of physicians in northern CHCs, provision of services on a 7 days a week, 24 hours a day basis was an onerous task. Physicians complained that there were no incentives to provide these services. MD/NP staff complements are usually too small to provide 24/7 coverage.

The use of satellite clinics and nursing outposts is one strategy for delivering services, particularly in small, remote communities. If these locations do not have a physician

onsite, then physicians at the distant end will be required to be available for consultation and support. Physicians expressed their concern about their legal responsibility and liability in cases where advice is given and a mishap occurs. These concerns need to be addressed with the appropriate colleges and malpractice insurance agency. Considering the long history of nursing services in isolated communities, this issue should be resolvable.

In the context of a shortage of physicians, CHCs will be in competition with other underserved communities and delivery models. As described, some of these models have much higher salary ranges and provide incentive payments for providing services for minimum periods of time. In the next 4-5 years, due to deregulation of fees of medical schools, graduating physicians will be entering the marketplace with substantially greater debt loads (\$80,000 – \$100,000 or more). Recruiting physicians to the current salary ranges will likely be difficult, particularly in non-underserved areas where salaries are \$20,000 a year less.

The Hay Group also looked at physician pay levels. They concluded that CHC physician pay levels are competitive with the market after comparison with rates in CHCs in Quebec and Saskatchewan, under-served area plans in Ontario, and average GP OHIP billing rates. The extent of work on this issue appears to be substantially less than what was performed for the other positions. Considering that MD positions account for the most frequent vacant position and the highest turnover of any position with low salaries identified as the number one reason, it seems unlikely that current pay levels are truly competitive. This is compounded by the relative shortage of physicians in the province and the more challenging client populations in CHCs. Increasing debt loads will only exacerbate the situation.

The OMA publishes a “scale of grading and remuneration for salaried physicians”.¹⁰⁶ Unfortunately the scale appears heavily influenced by government/industry work environments. Nevertheless, the scale recommends that the minimum salary for individuals with at least five years of experience to be \$130,000 and increases to \$140,000 for those with greater responsibility. According to the Canadian Institute for Health Information, the average gross billings for GPs who billed more than \$50,000 in 1997-98 was \$200,076.¹⁰⁷ Assuming practice overhead costs of 40%, this results in an average income of \$120,000. Simple comparison of average GP salaries is problematic since the patient populations in urban CHCs are quite challenging. The difficulty in recruiting GPs to these centres at the current pay scales indicates that the pay rates need to be adjusted. In underserved areas, CHCs will need to compete with other Ministry programs which pay \$128,000 to \$194,000 with additional retention bonuses.

Current Vacancies and Staff Turnover

CHCs were surveyed by the project coordinator in early 2001 regarding as vacancies and turnover of staff. Sixty-nine percent of responding CHCs had staff vacancies. MDs were identified as the position most likely to be vacant (32%). It was also the position most frequently identified as a barrier, either from too few funded positions or vacant

positions, to accepting new clients. MDs are also the provider with the highest turnover (74% of CHCs experienced turnover in the preceding three years). Salary levels being too low were the most frequently identified reason for departure with most MDs going into private practice. For each type of professional position, a substantial proportion of CHCs (25-40%) have experienced turnover (e.g. NP: 38% of CHCs have experienced turnover).

NPs represent 11% of vacancies with a variety of reasons identified for departures/vacancies including new grads not sufficiently qualified, geographic isolation, and salaries too low. Nurses and health promoters/outreach workers were responsible for a further 11% of vacancies each. Vacancies and turnover were reported to be due to low salaries and difficulty in recruiting to part-time positions. Vacancies in other providers including dietitians, SW, and managers had similar reasons. In urban areas, administrative support positions experience vacancies but can usually be filled. Reasons for turnover of these staff included stress, availability of other opportunities and salaries that are too low. There has been a 50% turnover of CHC executive directors in the past three years, with the majority departing for higher paying positions.

In summary, CHC salaries have been frozen for nine years and with increased demands for health care professionals in all settings consideration should be given to revising the salary scales.

Recommendation 4: Competitive Salaries and Benefits

Recommendation:

The CHC Program institute competitive salary scales and benefits for all CHC staff.

Review findings that support this recommendation:

- Salaries have been frozen for all staff since 1992;
- CHCs are experiencing frequent vacancies and high turnover of staff;
- Physicians compensation particularly in remote and rural areas (Community Sponsored Clinic and Northern Group Practices) exceeds that offered by CHCs;
- In northern and rural areas salary scales offered to Nurse Practitioners by hospitals is higher than those offered by CHCs;
- Shortage of nurses and physicians in Ontario;
- With deregulation of tuition fees, particularly for physicians, new graduates will have increasing debt load;
- MDs are paid a single stipend for being on-call regardless of frequency of call requirements;
- Hay Consultants performed market review of non-MD staff pay rates and recommended an increase in most positions;
- MD pay rates do not appear to be competitive.

Implementation of the recommendation requires:

- Based on Hay Consultant's recommendations re-assess salary scales and make appropriate adjustment.
- Based upon Hay Consultants' recommendations, it has been estimated by the Ministry that implementation would cost \$4.5 million.
- CHC Program re-assess physician pay rates.
- Payments for staff who are on-call needs to better reflect differing situations among providers.

Client Needs

CHCs are struggling with increasing demands for their services. CHCs indicated that not only are client numbers increasing, but that the complexity of these clients is increasing as well. Surveys conducted by the AOHC in 1998¹⁰⁹ and 1999¹¹⁰ found that CHCs were experiencing increases in the number and acuity of clients, difficulty recruiting staff, and restrictions on accepting new clients.

Presentation of service trends is limited by the continuing difficulties with the Program's information system, which is intended to track client service volumes, diagnoses and interventions. Available information on the number of active clients in 54 CHCs shows an increasing trend over the past five years (Figure 4). The number of individual service events has also increased from 1996-97 to 2000-01 based upon data from 24 CHCs.

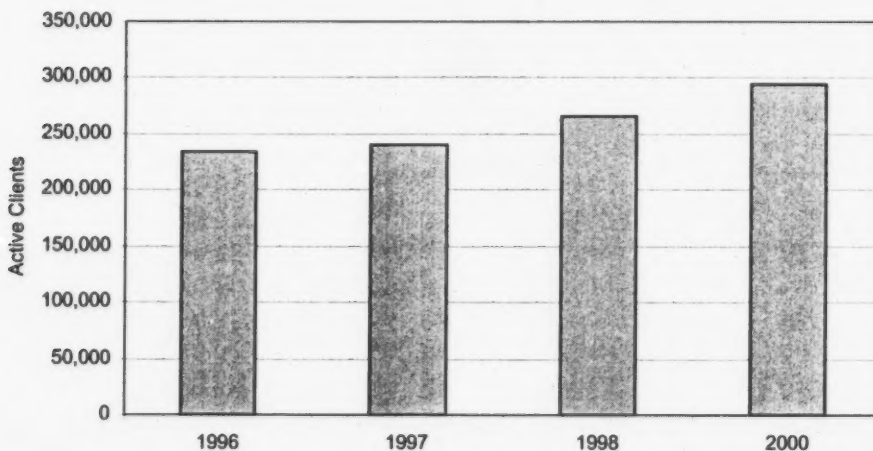


Figure 4: Number of active CHC clients by year. Data provided by CHC Program. Data not available for 1999.

One would anticipate an increase in service demands if the determinants of health that most affect CHC clients have not improved over time. Available information supports this observation.

The number of Ontario children living in poverty has increased from 11% in 1989 to 18% in 1998.¹¹¹ The number of children in working poor families has also increased, as well as those in families with long-term unemployment. Furthermore, the average depth of poverty has increased over time.

Many urban CHCs cited a lack of affordable housing as a major stressor for clients. The Federation of Canadian Municipalities has produced a review of the current housing situation.¹¹² Presenting data from the Canada Mortgage and Housing Corporation, vacancy rates have decreased from 1997-1999 in Ottawa, Toronto, Kitchener, Hamilton, Windsor, and London. Changes in rents in private apartments have increased the greatest in Ontario cities (compared with other provinces), with rates increasing from 25-43% in these six cities from 1989-1999. Vacancy rates for rental housing are below 1% in Toronto, Ottawa and Kitchener.

CHCs particularly in Toronto have substantial numbers of homeless clients. The City of Toronto released an extensive report on homelessness in 2000.¹¹³ The report documents an increasing trend in shelter use and requests for emergency housing; a greater proportion of families and youth in shelters; a greater length of stay in shelters by families; and high food bank use. Contributing factors to the situation include: decreased availability of affordable housing; increasing rents; no new construction of public housing; increased proportions of individuals and families spending 50% or more of their income on housing; and increased evictions.

Homelessness is also related to the process of deinstitutionalization of patients with chronic, severe mental illness. Over the past three decades, in-patient psychiatric beds have been reduced without a proportional increase in community mental health services. There are increasing numbers of people with mental illness who are homeless or living in substandard housing.^{113,114} Despite the intent of mental health reform to shift the balance of mental illness funding to the community, a review of mental health services' funding in Ontario found that institutional funding of in-patient services is still substantially more than community funding.¹¹⁵

Ontario is a major destination for immigrants. In 1999, 55% of all immigrants and refugees coming to Canada settled in Ontario (Table 6).¹¹⁶ Within this group, 80% settled in Toronto. Tables compiled by the Canadian Council for Refugees from Citizenship and Immigration Canada data show that the average annual number of refugees has averaged about 25,000 per year from 1995 to 1999.¹¹⁷

Table 6 - Number of Refugees and Immigrants Settling in Toronto, Ontario, and Canada. (1999)

	Toronto	Ontario	Canada
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Refugees	8,020	11,935	24,367
Total Immigrants (including refugees)	83,267	104,021	189,816

Citizenship and Immigration Canada

It is well recognized that the population is aging over time. In Canada, currently 12.5% of the population are 65 years or older and this will increase to 14.5% by 2011. However, the proportion of those 85 years and older will increase by 53% over the next decade. Since the number of chronic conditions and difficulties in maintaining independence increase with age, this increasing proportion of the very old will have an impact on services required.

The additional context is that these increases in needs are occurring during a time of increasing pressures on the availability of family physicians. Under-served communities used to be primarily in northern and remote communities. The number of under-served communities and the resultant number of physicians required is now higher in southern Ontario than in the north. Pressures on existing family physicians will make them less available to those with more complex needs (e.g. language barriers, mental health, multiple medical conditions). The intended shift of the bulk of primary care to a blended-capitation funding model could increase demands on CHCs if there are disincentives for PCNs to provide services to high needs clients.

In summary, health determinants affecting CHC clients have not improved over the past decade and many have worsened:

- Child poverty has worsened;
- Availability of affordable housing has worsened;
- Number of homeless has increased;
- The number of individuals with serious mental illness who are living in the community appears to have increased;
- Increase in the number of immigrants; increase from areas with distinct cultures;
- Increasing numbers of elderly, particularly the very old.

Current Barriers to Access

In addition to the survey on vacancies and staff turnover, CHCs were also surveyed regarding barriers to new clients accessing services. Of the 40 responding centres (74% response rate), 80% reported that acceptance of new clients was restricted as shown in Table 7.

Table 7 - Current Status of CHCs

State of Accepting New Clients	Proportion
No restrictions	20%
No new clients	32.5%
Homeless and non-insured only	17.5%

Accepting priority population only	25%
Accepting clients with no other options	2.5%
Accepting clients to replace clients who terminate only	2.5%

One in four of CHCs are accepting only priority populations and 20% are accepting only those clients with the fewest options such as homeless or non-insured clients. About 32% are not accepting any new patients. Restrictions on accepting new clients were primarily due to a shortage of staffing positions although in a third of CHCs, it was due to continuing vacancies in existing positions.

Recommendation 5: Expand Existing CHCs

Recommendation:

The CHC Program increase the staff complements and associated operating funds at existing CHCs where there is evidence of unmet service needs and it can be demonstrated that current staffing levels are inadequate to respond.

Review findings that support this recommendation:

- Clients with access barriers have limited options if there is no CHC in their community;
- Determinants of health that most affect CHC clients' need for service have not improved over the past decade;
- CHCs are increasingly less able to respond to service demands in their communities ;
- Most CHCs are restricting access to new clients.

Implementation of the recommendation requires:

- Application of consistent measures to assess the factors contributing to unmet service needs at individual CHCs such as: increasing service volumes; service access restrictions; increases in needs/complexity/acuity of clients; deteriorating determinants of health; inadequate complement to provide full range of services, evening/weekend clinics; on-call coverage.
- Increases in staffing should consider the use of the most appropriate provider in responding to the needs identified in the population. Increases in staffing will require adequate management and administrative supports and physical space.

Needs in Northern and Rural Areas

The CHC model has been used in rural and northern settings to meet the needs of underserved areas. According to the AOHC document *Community Health Centre Expansion in Ontario* (Oct. 2000), their expansion plan envisions 65 new centres, of which the majority will provide primary care to the underserved and northern communities.⁹⁹ There are many communities in Ontario interested in having CHCs and are at varying stages of proposal development. CHCs provide an infrastructure from which recruitment of providers, maintenance of client charts, and delivery of other health and social services can occur. The infrastructure of CHCs should also enable the use of satellite clinics to provide greater outreach to outlying areas. Other parts of the Ministry have developed strategies (e.g. CSCs, NGFPs, Underserved Area Program) to help communities recruit and retain physicians.

The Northern and Rural Health Framework identifies a potential role for hospitals to deliver a broad range of health and other services.¹¹⁸ Key features of the framework are:

- fully integrated and coordinated network that provides access to a range of programs and services
- focuses to a large degree on emergency and hospital services creating a network of specifically designated facilities

While the initial priority is on the implementation of the hospital networks, it appears that there was an intent to encourage hospitals to develop or enhance their current roles in communities as a focal point for the provision of other health and related services and for non-institutional patient care.^{119,120} The framework lacks detail on how primary services and other health and related services are to become more coordinated. Little or no progress has been made to address rural primary care services through this framework. In reviewing the criteria for level A and B hospitals, rural CHCs provide many services that are similar to or could complement those envisaged for level A and B hospitals. Discussion between the CHC Program and Ministry staff involved with the Northern and Rural Health Framework will be required as primary care service delivery evolves in these locations.

Needs Across the Province

The comprehensive, integrated approaches that CHCs utilize are particularly required for higher risk populations. While high risk populations might be concentrated in particular neighbourhoods and more evident in some rural and northern areas than others, they exist throughout Ontario. For example, many urban areas (e.g. Peel Region, Scarborough) have neighbourhoods with population profiles similar to those of existing CHCs. This has prompted other jurisdictions to ensure that CHCs are located throughout the jurisdiction to ensure availability of services to those who need them. This is most notable in Quebec but is also emerging under regional health authorities in Winnipeg and Vancouver. Not having a province-wide network of CHCs hampers the Ministry's ability to capitalise on the strengths of CHCs in the delivery of key Ministry strategies across the province.

The AOHC has about 85 communities who have expressed interest in having a CHC. The development of a proposal requires a certain degree of organization and planning. Communities with the greatest need may not be aware of CHCs as a service delivery model nor be able to pull together a proposal without assistance. The Program may need to support high need communities to develop proposals. Of the 85 communities with an interest in establishing a CHC, 59% are in rural or northern communities while 41% are urban communities.

Recommendation 6: Expand the Network of CHCs to Increase Access

Recommendation:

The Ministry should work toward the creation of a province-wide network of CHCs to meet the needs of populations facing access barriers including geographically dispersed populations in northern rural and under-served areas and disadvantaged populations in urban settings to increase access to primary care services based upon community support and needs assessment.

Review findings that support this recommendation:

- Increasing difficulty accessing primary health care in rural and remote areas;
- Interest expressed by many rural, northern and urban communities for CHCs as a delivery model for primary care in their communities;
- CHCs' have an infrastructure from which to: recruit providers (including comprehensive benefits package), retain patients' charts in community if MD leaves, provide administrative support, deliver Ministry strategies (e.g. diabetes, mental health), lessen professional isolation, address broader range of determinants of health;
- Scope for a collaborative relationship between family physicians and nurse practitioners in rural and remote areas;
- U.S. experience in using CHCs to deliver of services in rural and urban communities;
- Urban areas in the province without CHCs with population characteristics similar to CHC clients elsewhere;
- Use of CHCs to extend reach of services by utilizing satellite services (e.g. Ontario, US, Manitoba);
- Use of CHCs as a mechanism to improve access throughout a jurisdiction (e.g. Quebec, Winnipeg, Vancouver).

Implementation of the recommendation requires:

- CHC Program develop and forward plan and budget for approval for expansion in the network of CHCs, based on community support and needs assessment.
- CHC Program work with other areas of the Ministry to develop needs-based planning criteria.
- Ministry staff from CHC Program and Northern/Rural Health Framework work collaboratively to address the potential overlapping and complementary roles between CHCs and hospitals in the planning of northern and rural services.

SECTION IV: MINISTRY STRATEGIC PRIORITIES AND ROLE OF CHCS

In recent years, the Ministry has unveiled a number of strategic priorities in areas such as mental health, child health, diabetes, etc. which have an impact on the delivery of primary care (Appendix 1). There have been different mechanisms for delivery of these strategies. In this section, we highlight how CHCs are contributing towards the delivery and how they could be situated in the future to integrate services in a seamless fashion.

Mental health and perinatal health and early child development are health conditions that were assessed in this review and are highlighted in this section. The other health conditions already presented also contained several examples of CHC programming funded by other agencies.

Mental Health

Mental health issues are extremely common in primary care settings. Approximately 20% of Canada's adult population suffers from a mental disorder or drug abuse.¹²¹ Major depression and manic depression affect 5 % of Canadians and including anxiety disorders doubles that number. At least 25% of the medically ill have a treatable psychiatric disorder. A review of best practices in mental health reform was prepared for the F/P/T Advisory Network on Mental Health and identifies the core services and supports as well as a summary of system reform strategies.⁴¹ Recommended strategies and practices for the treatment of addictions have also been published.¹²²

Ministry Strategy

Several reports have addressed the needs for the reform of mental health services in Ontario. The current government has released its implementation plan for mental health reform,¹²³ which includes:

- models of service delivery based on best practices
- clear points of access to the system
- clearly defined roles and responsibilities for providers within the system

Local/regional planning is intended to identify partnerships, service agreements, common assessment tools and tracking systems. CHCs are identified as one of many possible providers in a comprehensive continuum of supports and services including health promotion/education, housing, 24-hour crisis telephone lines, mobile crisis teams, drop-ins, peer supports, hospital emergency services, holding/safe beds, primary care physicians, safe beds, and social/recreational programs.

CHCs' Role in Delivering Strategy

Some of the CHCs estimated that over half of their clients have diagnosed mental health problems. The urban CHCs responding to this health condition/issue have substantial numbers of clients with acute and chronic mental health problems. The extent to which these CHCs receive additional resources to address the mental health needs of these populations varies. For example, some of the CHCs manage and operate Assertive Community Treatment/Case Management (ACT) teams while others do not. During one site visit, concern was expressed by CHC staff that they had been informed that the hospital-based ACT team in their geographic area was not able to serve their clients because their illnesses were too severe. Some CHCs have mental health case managers attached to them and in one CHC, a mental health nurse is seconded from the Centre for Addictions and Mental Health (CAMH) to assist clients with severe chronic mental health problems who have been discharged from hospital. In another CHC, a case manager is attached to address mental health needs of immigrants within and beyond the CHC catchment area. Social workers and community mental health workers provide case coordination for CHC clients with significant mental health problems that do not qualify for the higher level case management services.

Mental health crisis response is typically a responsibility of other organizations. CHCs refer clients to crisis centres if indicated. Those CHCs with ACT teams provide 24 hour support to their clients. Primary care providers (mental health workers, psychologist, social work, nurses, physicians) will provide crisis intervention services during office hours. Primary care providers provide after hours and weekend medical on-call services. Crises often involve housing issues which is why tenant support and eviction prevention workers are part of the overall mental health strategy.

To support the primary care providers, arrangements have been made for psychiatrists and/or psychologists to provide consultations and case conferencing on-site on a regular (e.g. weekly, biweekly) basis. This model of care assists with the management of individual clients, and gradually builds the skills of the providers as they generalize their experience to other clients. Because of this greater range of skills and capacity, CHCs receive referrals from social agencies (e.g. food banks, social service drop-in settings) and at times, other physicians. One CHC takes primary care referrals from a psychiatric facilities' schizophrenia program.

CHCs offer a variety of drop-in and organized group events/activities for clients and their families. Examples include Schizophrenia Society meetings and family support groups, self-help collective kitchen cooking groups, outings for boarding home residents, peer

outreach, life skills development, and art therapy programs. Clients are also referred to community programs for vocational/educational services. CHCs also provide a variety of workshops and programs in the area of mental health including: anger management, anxiety/depression, self-esteem, and how to build healthy inter-personal relationships.

CHC staff advocate for clients who require assistance receiving services and finding and maintaining housing. Staff are involved with mental health awareness initiatives, strategic planning, needs assessment and program development. While CHC staff provide individual counselling in the area of addictions, referral to community addiction services are used. Harm reduction strategies are frequently utilized for the management of individuals with addiction/mental health issues. Some CHCs provide methadone while others provide care to clients who receive their methadone from an outside physician. Needle exchange programs are also provided by many CHCs or clients are referred to community partners who offer this service.

In summary, CHCs are involved in implementing several components of the mental health strategy.

Perinatal Health and Early Child Development

Perinatal health comprises the prenatal, birth, and early development periods for infants up to one month. Early child development extends this period up to the sixth year of life. Low birth weight is the single most important cause of infant mortality, especially in the neonatal period, and is strongly associated with poverty. There is increasing evidence that the first few years of life are particularly important in the development of children. Children living in poverty have higher prevalences of chronic health problems, higher rates of mental health problems and are more likely to have poor school performance and social impairment.

Perinatal and Child Health Strategies

The Ontario government has many programs and services for children and youth, delivered through multiple ministries. While there is no one overall strategy, the focus is on increasing the integration of services to reduce gaps and ensuring a continuum of services.¹²⁴ There has been substantial interest in Ontario and other provinces in the importance of early child development,¹²⁵ as well as the recognition of adolescence as a key phase of development.¹²⁶ The Ontario government commissioned a report addressing the state of current knowledge and recommended initiatives to support healthy child development.¹²⁷ Key features include:

- make early child development a priority
- children from all socio-economic levels can benefit from programs in early child development and parenting
- need for province-wide monitoring system to measure success
- community partnerships are integral to the delivery of programming

- early child development and parenting centres are part of an integrated framework for prenatal period and for children zero to six years which include centre activities; home visiting; home-based satellites; early problem identification and intervention
- supportive environments (improved maternity/parental leave benefits; family-friendly workplaces; tax incentives for development of centres)

The Healthy Babies, Healthy Children Program (HBHCP) is a prevention/early intervention initiative designed to give children a better start in life.¹²⁸ It is designed to ensure that all Ontario families with children aged prenatal to age 6 who are at risk of physical, cognitive, communicative and/or psychosocial problems have access to effective, consistent early intervention services. This program is a joint initiative the Ministry and the Ministry of Community and Social Services. Components of the program include:

- the development and maintenance of a network of health and social service providers
- prenatal and postpartum screening
- early identification of at-risk children
- provision of home visiting services

The Preschool Speech and Language Initiative intends that every preschool-aged child who requires speech and language services will receive service and acquire the communication skills needed for performance of daily activities required for personal and social sufficiency at home and at school.¹²⁹ District Health Councils (DHCs) were responsible for assessing pre-existing resources and developing a coordinated plan to address speech and language services in their community. Components of the system include:

- early identification
- simplified access and common intake
- assessment
- range of interventions
- transition planning, parent support and education services
- public awareness/education

The Ministry announced in December 2000 that hearing screening will now occur for all new babies and be delivered through the Healthy Babies, Healthy Children program.¹³⁰ The McCain and Mustard report prepared for the Ontario government highlighted the need for early child development and parent programming.¹²⁷

CHCs Role in Delivery of Strategy

CHCs have developed comprehensive approaches to perinatal health and early child development. To support women with complex needs, CHCs possess a range of skill sets (i.e. MD, NP, SW, nutritionist, health educators, cultural interpreters, community support

workers). They are involved in planning services in local networks/coalitions, and host workers of other agencies and receive funding to broaden and integrate the range of service delivery for their communities.

Prenatal care is frequently provided by a NP/MD team. Issues of concern are identified as early as possible and referral to other agencies made (e.g. addictions). Multi-lingual counselling materials and a combination of individual and small-group education interventions are utilized. Nutritional guidance through pregnancy is frequently provided by the on-site dietician/nutritionist. Many CHCs are involved with the Canadian Prenatal Nutrition Program (CPNP) which provides funds for milk coupons. Access to food is also facilitated by other food security programs including food banks. Attendance at prenatal care is encouraged by addressing barriers to participation (e.g. transportation, child care). Flow sheets have been developed by CHCs to ensure key aspects of care are provided. Pregnant women who miss scheduled appointments are followed up by staff who will make home visits if required. Staff also make contact with hard-to-reach pregnant women through their outreach visits to shelters and home visits. Prenatal education is provided on individual basis or in small groups for women who would have difficulty with organized classes (due to language, cost, transportation, etc.). NPs provide support to breastfeeding mothers and some CHCs have their own lactation consultants or link clients to breastfeeding support at other agencies (e.g. public health, hospitals).

Some CHCs function as transfer agencies for the midwifery program and have close working relationships with these programs. MDs at some CHCs also perform deliveries themselves. Close linkages with obstetrical departments are required because of the number of higher risk pregnancies involved, the need for arrangements for women without insurance coverage, and the requests from hospitals for postnatal care for women with no ongoing caregiver.

Additional prenatal and postnatal supports, up to the point that children enter the school system, are provided through CPNP programs, Better Beginnings, Better Futures (BBBF), and other programs. These supports frequently involve family visiting, prenatal and postnatal groups, play groups and toy lending libraries, parenting groups, and child and family advocacy. Three CHCs are funded sites for BBBF programs although others are involved in delivery of programming. The BBBF programs are designed to prevent young children in low income, high risk neighbourhoods from experiencing poor developmental outcomes. Some CHCs have woven together funding from multiple sources (e.g. MCSS, municipal government, United Way) to provide many similar services (e.g. parent/child drop-in, parent respite, toy library). While parent volunteers were involved, staffs at sites visited were ECE trained. To improve accessibility, services are frequently delivered in community locations other than the main CHC site.

HBHCP peer home visitors are an important component of the program and many CHCs have made arrangements so that the HBHCP visitors that work in their area are housed from their CHC site, facilitating referrals and communication with other service providers. Similar arrangements have also been made in some CHCs for Children's Aid Society (CAS) and preschool speech and language services. One CHC functions as the

regional lead agency for the preschool speech and language program in addition to direct delivery of service, and was identified by the Ministry program consultant as having a "model" program.

In summary, CHCs are extensively involved in the delivery of perinatal and child health strategies.

Other Ministry Strategies

The Ministry has a number of other strategies with potential relevance to the CHC Program. The Ministry's business plan states that disease prevention and health promotion is one of its core businesses.¹³¹ This is a broad range of programming including services to be delivered by specific agencies (e.g. public health units) to particular components of overall comprehensive strategies (e.g. diabetes strategy). The Ministry is currently working on a health promotion framework which captures the various components of health promotion to ensure they are included in the development of Ministry strategies. A focus on wellness and prevention is an objective of the CHC Program.

The Aboriginal Healing and Wellness Strategy evolved from the need to address the issues of family violence in Aboriginal communities and to create a provincial, Aboriginal-specific health policy.^{132,133,134} The strategy includes:

- a framework for dealing with immediate and long-term measures related to family violence issues through community designed and delivered programming
- a framework to improve Aboriginal health through equitable access to health care, culturally appropriate services, and support for programs
- strategic directions focus on health status; access to services; and planning and representation
- funding of health workers (community prevention, crisis intervention, health outreach, health liaison, translators); sites (healing lodges, treatment centres, shelters, planning authorities, maternal/child centres, CHAC, hostels); infrastructure programming (recruitment coordination office, information clearinghouse, patient advocate); and community support project funding

The strategy outlines not only what needs to be done but also how it must involve Aboriginal groups in the planning and delivery of services. These are values to which CHCs ascribe with any community with which they are working.

While the Ministry does not yet have a rehabilitation strategy, a provincial rehabilitation reference group prepared a report for the Ministry in March 2000.¹³⁵ The definition of rehabilitation adopted by the working group is that it is goal-oriented to enable individuals with impairments, activity limitations and participation restrictions to identify and reach their optimal physical, mental and/or social functioning. The need for a framework for rehabilitation services is due to a number of factors including restricted

access and fragmentation, public-private interface issues, resourcing, and service availability in rural and northern communities. Recommendations include:

- address rehabilitation needs across the entire life cycle
- development of local/regional service delivery models and implementation plans
- need for plans to identify core programs and services for northern, rural and remote residents
- identifying a set of core rehabilitation programs and services and appropriate funding requirements

In many communities, access to publicly funded rehabilitation services is limited unless clients qualify for CCAC services. Privately funded services are more readily available but high needs populations are unlikely to have either the funds or the insurance to cover the costs of these services. CHCs have an important role in participating in local/regional rehabilitation needs assessments and the development of service delivery models. In addition, they have the potential to provide these services directly on a more consistent basis. Some CHCs have PT/OT but current service delivery depends on less than optimal arrangements with service providers in some settings. Greater linkage with the Ontario Workplace Safety and Insurance Board (WSIB) in rural and northern settings would be an example of CHCs providing more regional-based services as well as increasing rehabilitation capacity.

Clarifying the Role of CHCs in Delivery of Ministry Strategies

A common theme that emerges from review of several Ministry strategies is the need for regional planning, service coordination and delivery. The challenge will be in supporting and delivering these initiatives at local levels. Ministry strategies frequently identify a layer of service delivery between a family physician's office and hospital-based services. Many CHCs fulfill this role by significantly expanding their range of services beyond that provided by their core funding, including the delivery of services beyond their primary care client populations and catchment areas. Examples include: Assertive Community Treatment teams, anonymous HIV testing, smoking cessation group classes, and preschool speech and language services. This delivery of a range of community-based services is a strength of the CHC model in providing the infrastructure to build more comprehensive service delivery. The development of these services by CHCs has frequently evolved from existing service delivery patterns and partnerships. While examples are widespread, overall it has developed on an ad hoc basis.

CHCs should be explicitly recognized as a provider of a broader range of health and other services. This does not preclude another agency that, depending upon local circumstances, is in a better position to deliver services. DHCs would have an integral role in this determination. Having a clearly articulated role in the delivery of key strategies would help ensure the full use of the CHCs potential. The CHC Program will need to continue to consider physical space and personnel planning for CHCs to allow them to plan and manage additional services.

Recommendation 7: Strengthen the Role of CHCs in the Delivery of Ministry Strategies and Other Services

Recommendation:

The Ministry consider CHCs as a delivery vehicle for all provincial strategies that have an impact on primary health services including health promotion and disease prevention.

The CHC Program support CHCs' capacity to deliver and integrate community-based programming from non-provincial sources of funding.

Review findings that support these recommendations:

- CHCs receive over \$30 million in funding from other sources (e.g. other Ministry, MCSS, federal government, local government, NGO, etc.);
- CHCs provide other programming to their registered populations, catchment populations, and beyond;
- Programming is complementary and integrated with core CHPB funded services;
- Use of CHCs as delivery agents for this programming has been ad hoc in nature. Some communities have priorities that may not reflect particular government strategies, thus attracting different levels of participation among the CHCs.
- Lack of provincial coverage by CHCs impairs the ability to take full advantage of their potential to deliver other health and social services throughout the province.

Implementation of these recommendations requires:

- The delivery of key Ministry and provincial government strategies through CHCs needs to be an explicit objective of the CHC Program actively supported by the Ministry, the AOHC and CHCs.
- The delivery of other programming by CHCs needs to be an explicit objective of the CHC Program actively supported by the Ministry, the AOHC, and CHCs.
- The CHC Program continues to address physical space and administrative support requirements to support the delivery and integration of community-based programming.

A summary of critical success factors for the Ministry strategies reviewed may be found in Appendix 8.

SECTION V: ADAPTATION IN PROGRAM DESIGN AND SERVICE DELIVERY PHILOSOPHY TO STRENGTHEN CHCS

Our review indicated that to strengthen CHCs as a delivery model for the different roles identified in previous sections, there is a need to modify the CHC Program design and service delivery philosophy. These modifications are outlined in this section.

CHC Service Delivery Roles

From the description of CHC services in the preceding sections, three key CHC roles emerge: providing comprehensive primary care services (as defined by PCCCAR and IOM), building community capacity, and the delivery and integration of community-based programs. These roles are interrelated as depicted in Figure 5. In reviewing program documentation, these core roles have not been consistently identified. This hinders the widespread recognition of the important contributions of CHCs within the overall health care system.

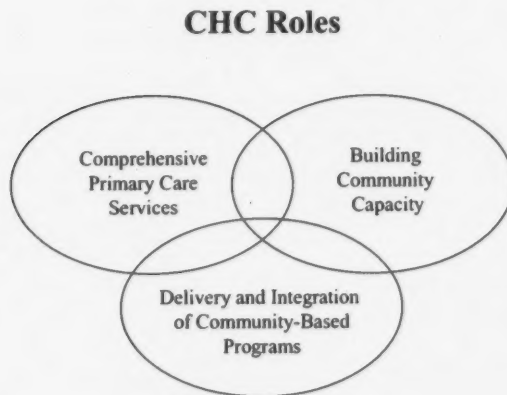


Figure 5: Roles of Community Health Centres

Compared with other primary care delivery models, this combination of roles is unique and needs to be more consistently expressed.

Program Logic Model

Program logic models are an important tool to facilitate understanding, communication, planning and evaluation of programs. Logic models have a variety of characteristics:¹³⁶

- Schematically describe a program to stakeholders to clarify how the program is structured
- Make explicit the logic or theory underlying the program
- List the activities that need to be implemented to achieve specified outcome objectives integrating program planning and evaluation
- Easier to develop for micro-programs vs. macro-programs

A high-level program logic model was included in the evaluability assessment performed by ARA Consulting in 1992.²³ It may be found in Appendix 9. The five objectives in the logic model are those later identified in the evaluation framework. An alternative way of

representing CHC services is to build a logic model based upon the three core roles of CHCs (Appendix 10). The current and alternative model represent the same programming but take a different approach or "slice." Depending upon the circumstances, use of one logic model may be more advantageous. There are three potential advantages of the alternative logic model:

- Communicating to funders the three core service roles of the CHC program
- Conceptualizing and delineating funding of the different roles
- Identifying additional indicators for inclusion in areas that are not addressed well by the existing program logic model (particularly primary care)

While the current logic model focuses on the processes of service delivery, the alternative model highlights the different service delivery roles CHCs perform in the broader health and social services system. This would be advantageous when communicating the role and functions of CHCs to other service providers and to potential funders. Because the functions and target populations are somewhat different for each role, this is of importance in conceptualizing funding streams and mechanisms. Even though primary care is a core role of CHCs, it is somewhat difficult to locate within the current logic model. This makes it more difficult to place potential outcomes and indicators that are related to this role. The strength of the CHC model in building community capacity and providing and integrating community-based programming from multiple funding sources are reflected in the other two components.

The potential implications of the alternative logic model will be further explored in the following discussion of the evaluation framework and development of performance indicators.

Evaluation Framework

The development of an evaluation scheme for CHCs has been ongoing for several years. In 1992, the evaluability of the CHC Program was assessed. It was found that there was evidence of a sound logic system underlying the Program but that consistent process and outcome indicators and associated measures were not in place.²³ Subsequently, in 1995, a review of the types of indicators used in primary health care, community health, and health promotion was performed, and data collected by CHCs at that time identified.¹³⁷ An evaluation framework was developed, centred around the five CHC program objectives: accessibility; provision of coordinated services; increasing health and well-being through prevention; increasing individual and community ownership for personal and community life; and provision of holistic services.⁴

Between 1995 and 1997, the CHC Program involved CHCs in a collaborative process to identify a consistent set of process and outcome indicators to assess the effectiveness of individual CHCs in delivering on the objectives of the CHC Program. For each of the objectives, high level indicators were identified and linked with one or more potential data sources. The CHC Program Evaluation System identifies key evaluation questions and broadly identifies measures or indicators pertaining to each, although specific data

items are not described. Data elements are collected from one or more of five broad information sources: individual encounters/service events, personal development groups, community health initiatives, organization (CHC level), and opinion research from staff, clients, lead volunteers and community members.

A F/P/T comprehensive review of planning and evaluating community-based health services was released in 1995.¹³⁸ It identifies a need for a range of objectives, evaluation questions and indicators that address processes, outcomes and structural items. There is definite overlap between the CHC Program's evaluation framework and that recommended in the F/P/T paper. The largest gaps between the two frameworks appear to be in the area of outcomes and structural items. These gaps are highlighted below:

Domain	Evaluation Questions
Outcome – Service Effectiveness	Improvement/maintenance of health status Reduction of health risk
Outcome – Economic Efficiency	Have costs been minimized while achieving effective results Prevention of unnecessary institutionalization
Structure – Health Human Resources	Use of most cost-effective service providers
Structure – Provider Skills	Providers possess the skill necessary for delivery of services
Structure – Information System	Utilize information system facilitating planning, delivery, monitoring and evaluation

It should be noted that no one has yet implemented this type of evaluation system. The current FFS system in Ontario provides no information other than how many units of service were performed. However, as primary care systems become more organized, indicators are being developed. A Ministry project is currently developing indicators for primary care, and the UK has similarly identified indicators. The CHC Program needs to take into consideration these developments, including the F/P/T recommendations, in the evolution of their evaluation framework.

In parallel with the development of the data content standards, the Ministry worked closely with CHCs and the software vendors supplying their clinical management systems, to ensure that the upcoming releases of their products would meet the evaluation system requirements.

Recommendation 8: Broaden Program Logic Model and Evaluation Framework

Recommendation:

The CHC Program expand the current program logic model and evaluation framework to better capture the key roles of CHCs: comprehensive primary

care, building community capacity, and delivery and integration of community-based programs.

Review findings that support this recommendation:

- Underlying structure of current logic model and evaluation framework is focused primarily on processes;
- Core roles as identified in this review, particularly primary care activities, processes and outcomes have not been given sufficient consideration;

Implementation of the recommendation requires:

- CHC Program, AOHC and CHCs to review the current logic model and evaluation framework to ensure that a broader range of objectives, inputs, processes and outcomes are included. In particular, primary care activities and outcomes need to be more comprehensively captured.

Information System

The evaluation system was the basis upon which the user requirements for the information system were established. The information system includes the following sets of data:

- annual agency level profiles
- individual and group service events
- monthly community initiative summaries
- a new financial reporting system
- client and intended population profile summaries
- captures extensive data on referrals and partnerships

The information system also has the ability to link services to program objectives and financial reporting and link with needs-based planning indicators. In the fall of 1998, the vendor of the clinical management software used by the majority of CHCs became insolvent. The new owner indicated that it would no longer support the software product installed in the CHCs beyond 1999. The AOHC, through its Information Systems Coordinating Committee (ISCC), reviewed options to replace the operational system software in use at CHCs with a view toward recommending that CHCs contract with a single vendor. A RFI/RFP process was carried out in 1998-99 with the selection of a vendor and system development and implementation in CHCs occurring through 1999. This system is intended to meet both the needs of CHCs and the reporting requirements of the Ministry.

Attempts to extract data from the CHC databases in the fall of 2000 met with substantial problems. Considering the extent of data entry, minimal data was available for this review. A new version of the data extraction software was released to CHCs in March 2001. The CHC Program is implementing a six month testing plan to review data quality

issues at all CHCs. A new version of the information system software is intended to be installed in CHCs in the late summer/fall of 2001.

A detailed analysis of the information system is beyond the scope of this report. However some observations can be made regarding the overall direction of this initiative. The plan to have the system operational by the fall of 2001 will mean that if successful, it has taken two years for the implementation of this system. There are actually two systems being developed. The current information system at the CHC level is being managed by the AOHC. A second system, managed by the Ministry, is to take the data provided by the current information system, apply business rules to ensure data quality, and then use this extracted data to generate reports. It appears that the interface between these two systems is particularly problematic.

Data is entered into the system following every individual service event and group client encounter. All encounters of sufficient magnitude that would normally require clinical charting are entered in the information system. Therefore entry of data is additional work above and beyond the clinical charting required by professional standards of practice. This situation may improve in the future if there is a move to electronic record keeping.

There is insufficient experience with the system to be able to identify an average time requirement for data input but discussion with many CHCs suggests that it takes more time than the targeted 45-90 seconds to input data. It is not clear why this discrepancy exists. However, multiplying this time difference by the number of providers and the number of contacts each is having, this becomes a substantial issue.

It will be important that the information system be able to capture the complexity of the clients that CHCs are serving. This will require adequate completion of the socio-demographic data as well as multiple diagnostic and service codes.

Information systems in other parts of the primary care system have primarily addressed OHIP billing and patient scheduling. PCN pilot sites are at the early stages of information system implementation.

Reports

The Ministry and the AOHC have heard a consistent message from CHCs since 1997 that they will need support in data reporting and analysis. To this end, AOHC has been funded to create more than 60 standardized operational reports for the network. The Ministry has created six reporting sets comprising more than 40 standardized reports to be published to CHCs once the data extraction issues are resolved. Both reporting sets are dependent upon successful extraction of data from the current information system.

The 40 standard reports to be made available through the Ministry were developed in consultation with CHCs. These fall into the following categories:

- Volume of services delivered by providers

- Intended populations of services delivered by providers
- Frequency of services delivered by providers
- Client profile (demographics)
- Intended population (receipt of types of services by population)
- Community initiatives (combination of provider, population, objectives, activities and milestones)

The list of 40 data items appear reasonable, although the ultimate test will be the usefulness of the outputs once the system is fully functional. The data should allow the Program to make peer comparisons and encourage continuous improvement in effectiveness and efficiency. This should lead to the development of standards or expectations for levels of service delivery. The work required to analyze and interpret the data and respond to errors and outliers should not be underestimated.

The CHC Program has supported the AOHC in developing a report generator that CHCs will use to extract data from their own local databases. Again, these reports were developed in consultation with CHCs to ensure that they address local health centre requirements. The extent to which the data is useful for the local CHC will ultimately determine the degree of interest and motivation for staff to enter data. The current difficulty of generating reports is a threat to data quality since this feedback mechanism is not in place. Beyond the technical issues of using the report generator, there is a more fundamental question as to the required skills it takes to interpret data, recognize the strengths and limitations of the data, and apply it to program planning and evaluation. CHC staff are not recruited for these skill sets nor would they be commonly found in service providers. The CHC Program and the AOHC have recognized the need to support these functions and the AOHC has been funded for training, supporting evaluation and the development of the report generator. Since the system is not yet fully operational, it not yet clear how much additional support will be required.

In looking at the various roles and activities involved, a variety of system supports are required. These include:

- **Analysis of Standard Reports:** there are 40 types of reports, each of which have multiple ways of displaying data. At the initial stages of this process, there will be a need to explore each type of analysis to determine its usefulness, troubleshoot data quality problems, identify the most useful formats, and then begin the process of understanding variations in indicators.
- **Report Generator for Local Analysis:** support for the use of the report generator by CHCs will need to be in place. This includes not only the support to the generator itself, but also the task of supporting CHCs to decide which analysis to use in what circumstances and how to appropriately interpret the data.
- **Support to CHCs to Have Custom Reports:** individual CHCs will likely have specific needs for data analysis to meet planning and evaluation needs. In addition to analysis that is beyond the scope of the "report generator," CHCs may also wish to compare or use data from other CHCs. Since they only have access to their own data, there will need to be a process to allow for multi-CHC data

analysis. Since identifying the appropriate data elements will require awareness of their local programming and circumstances, some form of regional support may be appropriate. Data needs may also extend beyond just the CHC databases (e.g. survey data, hospital separation data). Therefore accessing the capacity of the province's Health Intelligence Units through the local DHC or public health department may be worthwhile.

Recommendation 9: Program's Information System

Recommendation:

The Ministry take immediate steps to ensure that the Program's information system becomes fully operational to meet the requirements of the Ministry and CHCs.

Review findings that support this recommendation:

- Implementation of the information system occurred in the fall of 1999;
- There is continuing difficulty in extracting data from the information system; neither CHCs nor the Ministry have been able to generate any routine reports;
- With a lack of reports, there is no feedback mechanism for CHC staff to encourage quality of data entry and this limits program planning, monitoring and enrolment;
- Concern expressed by some CHCs regarding the time required for data entry associated with each client encounter;
- Ministry IT, CHC Program and AOHC staff are working to address problems with the system and expect to have it operational by fall 2001.

Implementation of the recommendation requires:

- Ministry provide sufficient staffing resources to ensure that either: a) the current system becomes fully operational; or b) the development of a new system is implemented. Project status and potential to fulfill this recommendation should be assessed in fall 2001.
- CHC Program assess CHC training needs related to data entry, data content standards, data extraction and report generation.
- CHC Program provide support to CHCs so that they are able to fully utilize the information system once it becomes operational.
- CHC Program to have sufficient staff to be able to analyze and act upon the findings from the standard reports.

Accountability

Compared with other primary health care delivery models in Ontario, CHCs have the broadest range of accountability mechanisms in place. These mechanisms are shown in table 8. Some of these have already been discussed. The remainder will be discussed in this section.

Table 8 - CHC Accountability Mechanisms

Stakeholder	Responsible For:	Mechanism
Ministry of Health and Long-Term Care	Service Delivery (targeted population(s), required services)	- Service Agreement - Required Reporting
Community	Services delivered in relevant manner meeting local priorities	- Community Board - Community Needs Assessment - Advisory Committees
Community Board	Required components of an effective organization in place	- Accreditation
Other Service Funder	Service Delivery of Funded Program	- Service Agreement - Expanded community input

Accreditation is a mechanism by which the CHC board assures itself that the CHC is a quality organization. The accreditation program, "Building Healthier Organizations" (BHO), is administered by Community Organizational Health Inc. (COHI) which is organizationally separate from the AOHC.¹³⁹ The BHO process assesses five building blocks of organizations: governance, management, administrative systems and practices, community capacity (activities that the CHC engages in to increase the community's capacity to address health risks and determinants), and programs and services. The BHO manual outlines the components and related questions for each of the building blocks. Similar to other accreditation processes, CHC accreditation is voluntary. Information on its findings is only available to the participating CHC. The BHO process appears to be an important, yet substantive undertaking for relatively small organizations. To date, 30 CHCs have undertaken the accreditation process. All but three CHCs are scheduled to complete the process during the first accreditation cycle, prior to the next cycle being initiated.

The Ministry provides funding to each CHC with monies for service delivery staff, administrative staff, purchase of services budget and rent. The Ministry therefore is funding CHCs to deliver a set of services and each CHC signs a service agreement with

the Ministry. Required reporting from CHCs to the Ministry is a mechanism by which the Ministry can monitor whether the services are being delivered as agreed.

The Provincial Auditor, in its fall 2000 report, notes the lack of performance indicators and service targets. In the past, service agreements contained the following service provision requirements:

- develop programs and services to meet the needs of the centre's priority programs
- provide physician services on a 24-hour daily basis
- provide approved health services
- develop schedules of evening and weekend coverage and hospital and house call coverage

Consistent with the Transfer Payment Accountability guidelines of Management Board, the CHC Program has developed more detailed service agreements and committed itself to incorporation of measurable objectives and expectations for services starting in 2001. At present, the service agreement includes the following Program requirements:

- Operate community health programs and services primarily for the population of the Services Area, with an emphasis on programs and services for the Priority Population
- Ensure physician services are available at the CHC
- Ensure physician services are available on an on-call basis 24-hours per day, seven days per week, except when a physician is available at the CHC or except in extraordinary circumstances
- Provide the health services described in schedule B (schedule is entitled "Additional Program Elements" and states that the "CHC shall provide and report on individual services, personal development groups and community initiatives as described in the Specifications Manual for the CHC Program Evaluation System.")¹
- Provide such other services as shall be required by the Manual or the Policies

Recommendations with respect to defining the required services and hours of operation have been addressed earlier in this report. The Ministry is currently working with CHCs to develop a series of performance indicators that would be included in the service agreements.

Performance Indicators

In February 2000, the CHC Program launched a process in consultation with the AOHC, to generate performance indicators for the Program based on the data elements that make up the CHC Program Evaluation System and its five program objectives (accessibility;

¹ The Specifications Manual for the CHC Program Evaluation System is what its title suggests. It defines what and how information will be captured to assist the Program assess the fulfillment of the Program's objectives.

coordination of care; wellness and prevention; holistic approach; capacity building). The CHC Program intends to incorporate the indicators into future service agreements. CHC executive directors reviewed a draft set of indicators in December 2000. The current plan is to further define and detail the indicators from January to May 2001, after which the data and reports for the various indicators will be reviewed from May to September 2001.

Performance indicators are markers or measures which convey quantifiable information about progress toward goals and objectives.¹⁴⁰ When precise measures are unavailable, proxy measures are used. Ideally, indicators should be compared to performance targets made in advance. Criteria for the selection of performance indicators include the following:¹⁴¹

- *Valid* – measure the condition or event it is intended to measure
- *Reliable* – produce the same result when used under same conditions or for same event
- *Specific* – measure only the condition it is intended to measure
- *Sensitive* – reflect changes in the state or event being measured
- *Actionable* – provide information which allows assessment and decision making
- *Practical* – available without extreme effort and when most useful
- *Affordable* – available at reasonable cost which doesn't exceed its value
- *Integrated* – capable of being integrated into routine data collection mechanisms (e.g. surveys, administrative collections)
- *Non-distorting* – do not only drive organisational effort to those areas being measured
- *Non-manipulable* – indicators cannot be manipulated to produce particular results
- *Unambiguous*
- *Relevant to the needs of potential users*
- *Provide early warnings*
- *Attractive to the media*
- *Comparable over time*

Development of performance indicators in community-based health service organizations is a substantial undertaking. A distinction should probably be made between the broad

range of questions and indicators used in an evaluation framework and the specific performance indicators one might use in a service agreement. There are no existing sets of indicators used elsewhere in Ontario or Canada.

The December 2000 version of the performance indicators was assessed in this review. For each program objective, four to seven high level program goals have been developed. For each goal, one or more evaluation questions have been identified. The questions focus on a specific area within the theme deemed critical to evaluating the success of the program. The next step in this exercise involved efforts to identify a measurable aspect within this dimension that can generate answers to the evaluation question. Possible indicators are identified as being able to provide a consistent and reliable measure to answer the evaluation question.

For the set of indicators identified as of December 2000, the indicators' project group has estimated that the current information system contains about half of the data requirements of the identified indicators. Most of the remaining indicators require survey work with some achievable through enhancement of the evaluation system data set.

There are several challenges facing this initiative, including:

- Questions are qualitative in nature
- Questions are primarily based upon processes
- Analysis will depend upon high quality data entry
- Unclear whether consistent and reliable targets can be set for most of the indicators being considered

Essentially, the above limitations are based upon reliance on a process-oriented evaluation framework as well as attempting to capture all aspects of the evaluation framework in the set of performance indicators. Qualitative and quantitative data have different strengths and limitations, are analyzed differently, and provide different types of information. Because of these differences, a mixture of both types of data collection and analysis is frequently included in the overall evaluation scheme of a service or program. As such, qualitative questions should be included in the evaluation framework of the CHC Program.

However, the development of performance indicators for inclusion in funding agreements is a different purpose from the overall evaluation of the Program. It is difficult to use quantitative measures to answer qualitative questions because the nature of the question demands a breadth of data that captures the context of the issue. This inclusion of context is a strength of qualitative evaluation methods. However, the need for this additional context to interpret measures limits the extent to which results can be readily compared. For example, one draft indicator is "the proportion of clients with coordination service codes" which is to be a measure of "interdisciplinary team-based approaches." This will be challenging to interpret because it depends upon: the nature of the presenting issue; the nature of any other existing issues or conditions; the appropriateness of using multiple team members in the particular scenario; and the adequacy of data entry to capture this

type of activity. All of these are contextual aspects which will hinder use of quantitative data to answer what is essentially a qualitative question. It is also not clear how one would set a desired target for this type of measure. While it may be appropriate to include this question in the evaluation framework, it is not clear that it should be a performance indicator intended to enhance accountability to the Ministry.

The development of performance indicators is a substantive project in itself. Some suggestions for possible consideration are outlined below.

Comprehensive Primary Care

There are a number of areas of primary care that should be considered for inclusion in the development of performance indicators. The control of chronic conditions is a fundamental part of the delivery of primary care services and is not addressed in the current evaluation scheme or performance indicators exercise. Yet part of the benefits one would expect from having an interdisciplinary team and coordination of care would be better control of conditions such as diabetes, hypertension and asthma. Indicators can be developed to assess the implementation of best practices' systems, of control of the condition, and potentially even more downstream measures such as complications and hospitalization. Assessing control is not difficult and many CHCs are expending substantial energies assessing these issues using chart audits. These efforts point to the interest and importance of these types of indicators at the field level.

Clinical preventive interventions such as cancer screening and immunizations have a substantial evidence base. The evidence of better preventive practices in CHC vs. FFS settings has also been described. However, coverage levels of these items are not included in the evaluation framework and thus current data collection is insufficient to allow their calculation. Performance indicators for these preventive measures need to be included (they are included in PCN contracts tied to incentive payments). Tracking these items, as well as preventive medicine performance indicators, would be greatly facilitated by an electronic client record.

CHCs are funded by the Ministry to provide services. Limited resources and high service demands provide incentives to establish efficiencies. Nevertheless, there is a need to include efficiency-oriented performance measures so that this issue can be explicitly assessed and addressed where necessary. Ideally, cost items would be compared with outcomes. In the interim, peer comparisons can be made to look for opportunities for efficiency improvement.

Building Community Capacity Programming

The development of performance indicators for this core role has some unique challenges. Priority issues will vary between CHCs and for the same issue, the exact process, partners, and phase of implementation will vary between communities. At the Ministry level, routine reporting would primarily involve the facts of the programming (e.g. target group, number of contacts, etc.).

The Evaluation Framework has a built-in "logic framework" which includes broad and specific issues, intended populations, activities, and milestones. While all the pieces are there, in reality the information system is only functioning as a tracking system because there is no standardization of the milestones. For example, one may enter that a "reduction in incidents of aggression" (code ma710) has been achieved. However, there are many ways in which this could be defined and measured. If the milestones are to be meaningful, there will need to be a supporting process in place, in which individual programs have their own logic models and key process and outcome indicators identified with standardized measurement. Some combination of reporting through the information system supplemented with additional details may be required.

It is unclear how one will be able to establish valid, reliable and specific quantitative measures to adequately address the performance in this area. Some indicators have been drafted but their use will need to be assessed once data become available to determine how well they meet the criteria for ideal indicators.

Delivery and Integration of Community-Based Programming

Other services delivered by CHCs will have their own reporting and evaluation schemes. Performance indicators in this area need to consider the extent to which CHCs are utilized to deliver additional programming and the satisfaction of funders and clients with CHC services. These are therefore performance measures for the CHC Program as much as they are for individual CHCs. Success will depend upon active support by the Ministry (including the CHPB). Therefore, inclusion in funding agreements may not be appropriate.

Additional Performance Indicators for Consideration

There are many more types of indicators that could be considered.¹³⁸ The following table provides examples of some ***additional*** performance indicators for consideration.

Table 9 - Additional Performance Indicators for Consideration

CHC Role	Indicator Group	Indicators	Data Sources
Comprehensive Primary Care	Clinical Preventive Services	% immunization % cancer screening Tobacco cessation (counselled, group programming, quit rates)	Require modification of current information system;

CHC Role	Indicator Group	Indicators	Data Sources
	Control of chronic conditions	Process indicators for implementation of best practices % of diabetics with adequate control (HbA1C) % of hypertensives with adequate control (BP measure) % asthmatics and their families who receive education on self-care and have treatment plan; control as assessed by peak flow Other possibilities: Rate of hospitalization Rate of complications Rate of institutionalization	Not in current system; indicators need to be identified and tracking system created; These would require more sophisticated data collection, analysis
	Efficiency	Encounters per provider FTE # active clients/FTE (once other data is available, should be able to determine other items: e.g. cost/enrolled client; cost/client with DM)	Information system
Building Community Capacity		Qualitative assessment of program plan and implementation (supplement with quantitative measures as developed and successfully piloted)	Annual Project Submission
Delivery and Integration of Community-Based Programming	Individual CHC	Client satisfaction Funder satisfaction	Survey
	CHC Program	Funder satisfaction Additional funding attracted (\$) Extent of use of CHC as delivery mechanism by key Ministry strategies	Survey Budget data Administrative data

The preceding discussion is based upon the information supplied as of December 2000. Since then, the structure of performance indicators has evolved substantially with a more comprehensive set of indicators being considered.

Recommendation 10: Performance Measures

Recommendation:

The CHC Program, in consultation with the AOHC and CHCs, implement performance measures reflecting the range of services CHCs provide including inputs, processes and outcomes.

The CHC Program support the efforts of CHCs to develop operational level performance indicators.

Review findings that support these recommendations:

- CHC service agreements have not included performance measures in the past;
- The CHC Program has been in the process of developing performance indicators since February 2000;
- This process has included the AOHC and CHC representatives;
- Sixty-eight draft indicators developed as of December 2000 were based upon the five process objectives of the evaluation framework;
- The indicators are predominantly process oriented, based upon qualitative questions, and do not adequately address primary health care services and efficiency measures;
- A broader set of indicator dimensions is now being considered.

Implementation of these recommendation requires:

- The CHC Program develop indicators along a full spectrum of services, (e.g. chronic disease management, preventive care, access, satisfaction, program efficiency, etc.). Strongly suggest experience with a few measures before expanding to a larger number of indicators.
- The CHC Program should routinely assess differences among peer groupings of CHCs in the performance measures (including efficiency measures).
- The CHC Program collaborate with the PCN initiative who have a current project to develop performance indicators for primary care.
- The CHC Program support CHCs to develop the capacity to generate their own measures of performance in contributing toward quality outcomes and best practices.

Best Practices

The CHC Program has recognized the importance of supporting CHCs by using the provincial association to develop and share best practices. There is no comparable initiative in other parts of the primary care system. The AOHC Best Practices Steering Committee has identified that best practices have the following components:¹⁴²

- Development of the guideline based on evidence, expert and/or user group review or consensus
- Dissemination
- Implementation process
- Evaluation

For specific diseases or conditions, practice guidelines from such sources as the Canadian Task Force on the Periodic Health Examination¹⁴³ and the Centers for Disease Control and Prevention (CDC)¹⁴⁴ are available and best practices becomes an implementation issue. Key implementation issues include identifying key components to the intervention, how they are to be implemented, who is responsible for doing what, and how will success be measured. The AOHC has developed an implementation process for best practices referred to as the "Documentation Workbook" to guide CHCs. It is being piloted for asthma education and drop-in youth programs. Since there are many different programs that could be addressed in this manner, initial selection of programs will need to be prioritized. Selection criteria could include the following:

- Condition with high prevalence
- Condition with significant complications
- Established practice guidelines
- Condition that uses a lot of CHC resources
- Projected ease of identifying performance indicators

The intent should be to identify the key implementation strategies and performance indicators for specific programs which can be utilized throughout the CHC Program. Dissemination of findings and support for uptake by other CHCs needs to be supported. Because some Ministry strategies are developing performance indicators, (e.g. diabetes strategy, PCNs), the best practices initiative should be pursued with an awareness of any developments occurring in other parts of the Ministry as well as new practice recommendations.

The best practices approach envisioned will likely be more straight forward and more easily generalizable for clinical practices than those that are more health promotion focused. This is because the latter is much more context dependent. Experience with the pilot and the potential for findings to be generalizable will be necessary to inform the most appropriate next steps.

Recommendation 11: Best Practices

Recommendation:

The CHC Program support the development and implementation of best practices for key health conditions.

Review findings that support this recommendation:

- The current AOHC initiative to map out key processes to achieve desired outcomes should be helpful in identifying critical steps in the implementation of best practices;
- This process should be complementary to the development of program performance indicators (e.g. best practices supports how to achieve success in control of diabetes).

Implementation of the recommendation requires:

- Prioritization of programs for inclusion in the best practices initiative.
- Development of indicators to support implementation including input, process and outcome measures.
- Dissemination of best practices' approaches (e.g. communication of results, sharing of tools, peer mentoring, and peer comparisons).

Funding Mechanism

CHCs are funded on a line-by-line program budget. Primary care reform recommendations include the use of blended funding models with at least some of the budget based on capitation. In their primary care reform report, PCCCAR identified different types of funding mechanisms:

- Population based funding (capitation);
- Additional/complementary funding for programs that go beyond the core basket of services to address the specific needs of a defined community (e.g. people with AIDS) or clients who are difficult to enrol (e.g. the homeless);
- Funding for additional services such as emergency work, surgical assists, visits to homes, hospitals, long-term care facilities;
- Quality incentives for meeting agreed-upon targets.

CHC budgets are program-based with funding for specific types of staff and operating expenses. The budget size is historically based with justifications required for additional staff. This is similar to CHCs elsewhere in Canada.¹ This mechanism falters when additional funds are not available. Unlike other primary care models in which funding is related to either the units of service delivery or the number of people served, CHC

funding is only indirectly linked to levels of service provision. In a climate of frozen budgets, CHCs will be penalized if they attract new clients, expand services, or reach out in other ways to their communities since these all increase service delivery demands without any change in funding. Considering that CHCs are placed in high needs' communities to improve access and raise expectations regarding service availability, this places CHCs in an untenable situation. As previously discussed, the majority of CHCs are restricting new clients in some manner. In the absence of service expectations or performance measures, it is unclear at what point such restrictions are appropriate.

Hutchison et al. identify six desirable characteristics of funding mechanisms:¹⁴⁵

- **Validity:** have a valid means of establishing relative needs for health services; capable of dealing with atypical populations (e.g. socio-economic disadvantaged, high concentration of persons with serious, chronic disease);
- **Acceptability:** understandable and acceptable to participants including funders, managers, providers, care recipients, and public;
- **Resistance to Manipulation:** resistance to manipulation by managers, providers, and recipients;
- **Flexibility:** facilitate appropriate reallocation of resources among sectors programs, and providers;
- **Avoidance of Perverse Incentives:** avoid incentives to overservice or underservice
- **Feasibility:** be financially and administratively feasible.

If one looks at the roles of CHCs, and built a funding mechanism from scratch, there are different considerations to be taken into account, as shown in the table below.

Table 10 - Factors Requiring Consideration in Determining Funding for CHC Roles

Comprehensive Primary Care Services	Building Community Capacity	Delivery and Integration of Community-Based Programming
- Size of <i>client</i> population being served - Socio-demographic characteristics of <i>client</i> population - Proportion registered - Acuity and complexity of care - Make-up of service team - Need for service integration	- Size of <i>community</i> population being served - Socio-demographic characteristics of <i>community</i> - Analysis of existing community assets - Analysis of population health indicators	- Multiple funding sources - Type of service; fit with other services delivered - Size, geographic distribution, and clinical/demographic characteristics of clients - Opportunities to partner with other organisations

A distinction is made regarding the characteristics of clients for primary care services and those of the defined catchment area. Building community capacity is focused upon the

latter. The individual clients attracted to services at a CHC, can be at even higher risk than that of the broader high risk community from which they come.¹⁴⁶ This is essentially the concept of the “ecological fallacy” in which the characteristics of the individual may be quite different from that of the population.¹⁴⁷ Analysis in the UK has found that not until population groups are at least 60,000-80,000 do the patient population characteristics tend to be similar to that of census data.¹⁴⁸

The smaller the population being served and/or the greater the difference the population is from being average, the greater the limitations with capitation-type funding. The CHC Program is faced with both these challenges. There does not currently appear to be a specific “funding formula” for CHCs although in the absence of new monies for many years, there has not been a strong demand for one. However, ideally there would be a transparent process by which CHCs could see what determines their funding allocation and what are the related service expectations. In the chronic shortage/absence of data, expenditures are managed without the ability to assess and respond to service delivery measures. Better data on client characteristics, interventions and eventually outcomes should improve the rigor of funding mechanisms.

CONCLUSION

Community Health Centres use a determinants of health approach to meet the needs of clients and communities with barriers to accessing health services (socio-economic status, language barriers, mental illness, homeless, elderly, geographic isolation). This review found that CHCs are unique among primary care delivery models in that they combine the delivery of comprehensive primary care services with the building of individual and community capacity, and the delivery and integration of other community-based services. CHCs are the only model that currently delivers on the range of recommended components of primary care reform (e.g. inter-disciplinary services, community involvement, coordination of care, alternative payment mechanism, methods for quality improvement). Current plans of primary care networks do not address the needs of vulnerable populations. Most CHCs are either restricting or not taking any new clients. The lack of any increases in staff wages since 1992 is contributing to staff turnover and vacant positions. Many CHCs have small staff complements that impair the provision of extended hours of service. Despite the key role CHCs play in delivery of other health and social services, these relationships have developed primarily on an ad hoc basis. The recommendations of this strategic review, if implemented, would strengthen the Ministry’s ability to harness the full potential of CHCs in delivering key Ministry strategies.

REFERENCES

- ¹ Albrecht D. Community Health Centres in Canada. *Int J Health Care Qual Assur* 1998; 11: 5-10.
- ² Hastings JEF. The Community Health Centre in Canada: report of the Community Health Centre project to the Conference of Health Ministers. , Ottawa: Health & Welfare Canada, 1972. Three volumes.
- ³ Bozzini L. Local Community Services Centres (CLSCs) in Quebec: description, evaluation, perspectives. *J Public Health Policy* 1988; 9: 346-375.
- ⁴ Specifications manual for the CHC program evaluation system. Revised edition. July 1999.
- ⁵ Forest PG, Gagnon D, Abelson J, Turgeon J, Lamarche P. Issues in the governance of integrated health systems – executive summary. Canadian Health Services Research Foundation, 1999. Available from: <http://www.chsrf.ca/english/document-library/index.html>.
- ⁶ Health Services Restructuring Commission. Primary health care strategy. December 1999. Available from: http://www.hsrfc.gov.on.ca/e_menu.htm
- ⁷ Provincial Co-ordinating Committee on Community and Academic Health Science Centre Relations. New directions in primary health care. 1996.
- ⁸ Arai S. Volunteer services in CHCs and AHACs: issues of management, support and the volunteer's experience in the CHC/AHAC model of care. Association of Ontario Health Centres, 2000.
- ⁹ Lalonde M. A new perspective on the health of Canadians. Ottawa: Ministry of Supply and Services, 1975.
- ¹⁰ Evans RG, Barer ML, Marmor TR (Eds). Why are some people healthy and others are not? New York: Aldine de Gruyter, 1994.
- ¹¹ Wilkinson RG. Socioeconomic determinants of health: health inequalities: relative or absolute material standards? *BMJ* 1997; 314: 591-595.
- ¹² Premier's Council on Health, Economics and Social Justice. Nurturing health: a framework for the determinants of health. Toronto: Healthy Public Policy Committee, 1991.
- ¹³ Canadian Institute of Child Health. Chapter 6: Poverty. The health of Canada's children: a statistical profile. Vol. 2. Ottawa: Canadian Institute of Child Health, 1994.
- ¹⁴ Mustard F. Ideas, collaboration and healthy children. *J Ideas* 1996; 3: 3-8.
- ¹⁵ Hertzman C, Wiens M. Child development and long-term outcomes: a population health perspective and summary of successful interventions. *Soc Sci Med* 1996; 43:1083-1095.
- ¹⁶ Shah CP et al. The health impact of unemployment: Accepted by Canadian Public Health Association as a Discussion Paper and all the resolutions at their Annual Meeting, Vancouver 1996.
- ¹⁷ Shah CP, Hodge M. Homelessness and health; Canadian Public Health Association; Halifax, 1997.
- ¹⁸ Jin R, Shah CP, Svaboda T. Unemployment: cause or effect? *CMAJ* 1996; 154: 1467-1468.
- ¹⁹ World Health Organization. Ottawa charter for health promotion. Ottawa: Health and Welfare Canada, 1986.
- ²⁰ Health Canada. Strategies for population health: investing in the health of Canadians. Ottawa: Ministry of Supply and Services Canada, 1994.
- ²¹ Institute of Medicine. Primary care: America's health in a new era. Washington: National Academy Press, 1996.
- ²² Blumenthal D, Mort E, Edwards J. The efficacy of primary care for vulnerable populations. *Health Serv Res* 1995; 30: 253-273.
- ²³ ARA Consulting Group. Evaluability assessment of Ontario's Community Health Centre program. October 1992.
- ²⁴ Abelson J, Hutchison B. Primary health care delivery models: what can Ontario learn from other jurisdictions? A review of the literature. Ontario Ministry of Health. April, 1994.
- ²⁵ Dievler A, Giovannini T. Community Health Centers: promise and performance. *Med Care Res Rev* 1998; 55: 405-431.
- ²⁶ Starfield B, Powe NR, Weiner JR, Stuart M, Steinwachs D, Scholle SH, Gerstenberger A. Costs vs quality in different types of primary care settings. *JAMA* 1994; 272: 1903-1908.
- ²⁷ Renaud M, et al. Practice settings and prescribing profiles: the simulation of tension headaches to general practitioners working in different practice settings in the Montreal area. *Am J Public Health* 1980; 70: 1068-1073.

- ²⁸ Battista RN, Spitzer WO. Adult cancer prevention in primary care: contrasts among primary care practice settings in Quebec. *Am J Public Health* 1983; 73: 1040-1041.
- ²⁹ Battista RN, Williams JL, MacFarlane LA. Determinants of primary medical practice in adult cancer prevention. *Med Care* 1996; 24: 216-224.
- ³⁰ Pineault R, Maheux B, Lambert J, Beland F, Levesque A. Characteristics of physicians practicing in alternative primary care settings: a Quebec study of local community service centre physicians. *Int J Health Services* 1991; 21: 49-58.
- ³¹ Hutchison B, Woodward CA, Norman GR, Abelson J, Brown JB. Provision of preventive care to unannounced standardized patients. *CMAJ* 1998; 158: 185-193.
- ³² Paulitz AM, Selby JV, Grossman S, Finkler LJ, et al. The colon cancer prevention program (CoCaP): rationale, implementation, and preliminary results. *HMO Pract* 1997; 11: 5-12.
- ³³ Pong RW, Saunders D, Church J, Wanke M, Cappon P. Building a stronger foundation: a framework for planning and evaluating community-based health services in Canada. Component 1. Health human resources in community-based health care: a review of the literature. Ottawa: Health Canada, 1995.
- ³⁴ Mitchell A, Pinelli J, Patterson C, Southwell D. Utilization of nurse practitioners in Ontario. Hamilton: Ontario Ministry of Health, 1993.
- ³⁵ Mundinger MO, Kane RL, Lenz ER, Totten AM, Tsai WY, Cleary PD, et al. Primary care outcomes in patients treated by nurse practitioners or physicians. *JAMA* 2000; 283: 59-68.
- ³⁶ Ontario College of Family Physicians. Family medicine in the 21st century – implementation strategies: a discussion paper. April 2000.
- ³⁷ Feldman W. Primary care reform. *Annals RCPSC* 2001; 34: 68-69.
- ³⁸ Richardson G, Maynard A, Cullum N, Kindig D. Skill mix changes: substitution or service development. *Health Policy* 1998; 45: 119-132.
- ³⁹ Jenkins-Clarke S, Carr-Hill R, Dixon P. Teams and seams: skill mix in primary care. *J Adv Nurs* 1998; 28: 1120-1126.
- ⁴⁰ Barr O. Interdisciplinary teamwork: consideration of the challenges. *Br J Nurs* 1997; 6: 1005-1010.
- ⁴¹ Health Systems Research Unit, Clarke Institute of Psychiatry. Review of best practices in mental health reform. Ottawa: Health Canada, 1997.
- ⁴² Miranda J, Munoz R. Intervention for minor depression in primary care patients. *Psychosomat Med* 1994; 56: 136-142.
- ⁴³ Vohlonen I, Pekuriemi M, Saltman RB. Re-organizing primary medical care in Finland: the personal doctor program. *Health Policy* 1989; 13: 65-79.
- ⁴⁴ Ontario Case Managers' Association, Ontario Community Support Association, Ministry of Health and Long-Term Care. Provincial case management standards project: consultation document. April 2000.
- ⁴⁵ Van der Feltz-Corenelis CM, Lyons JS, Huyse FJ, Campos R, Fink P, Slaets JPJ. Health service research on mental health in primary care. *Intl J Psychiat Med* 1997; 27: 1-21.
- ⁴⁶ Tengs TO, Adams ME, Pliskin JS, Safran DG, Siegel JE, Weinstein MC, Graham JD. Five hundred life-saving interventions and their cost-effectiveness. *Risk Analysis* 1995; 15: 369-390.
- ⁴⁷ National Advisory Committee on Immunization. Canadian immunization guide, 5th ed. Ottawa: Canadian Medical Association, 1998.
- ⁴⁸ Centers for Disease Control. Vaccine-reportable diseases: improving vaccination coverage in children, adolescents, and adults. *MMWR* 1999; 48 (RR-8).
- ⁴⁹ Health Canada. Cancer updates: breast cancer in Canada. April 1999. Available from: http://www.hc-sc.gc.ca/hpb/lcdc/bc/facts_e.html
- ⁵⁰ Canadian Task Force on Periodic Health Examination. Screening for breast cancer, in: The guide to clinical preventive health care. Ottawa: Canada Communication Group, 1994.
- ⁵¹ Ringash J, Canadian Task Force on Preventive Health Care. Preventive health care, 2001 update: screening mammography among women aged 40-49 years at average risk of breast cancer *CMAJ* 2001; 164: 469-476.
- ⁵² Health Canada. Cancer updates: cervical cancer in Canada. March 1998. Available from: http://www.hc-sc.gc.ca/hpb/lcdc/bc/updates/cervix_e.html
- ⁵³ National Cancer Institute. Screening for cervical cancer. January 2001. Available from: <http://cancernet.nci.nih.gov/>
- ⁵⁴ Canadian Task Force on Periodic Health Examination. Screening for cervical cancer, in: The guide to clinical preventive health care. Ottawa: Canada Communication Group, 1994.

- ⁵⁵ Snider J, Beauvais J, Levy I, Villeneuve P, Pennock J. Trends in mammography and pap smear utilization in Canada. *Chron Dis Can* 1996; 17: 108-117.
- ⁵⁶ Goel V. Factors associated with cervical cancer screening: results from the Ontario Health Survey. *Can J Public Health* 1994; 85: 125-127.
- ⁵⁷ Marks JS, Lee NC, Lawson HW, Henson R, Bobo JK, Kaeser MK. Implementing recommendations for the early detection of breast and cervical cancer among low-income women. *MMWR* 2000; 49 (RR02): 35-55.
- ⁵⁸ Fernandez MA, DeBor M, Candreia JM, Wagner K, Stewart KR. Evaluation of Encore: a community-based breast and cervical cancer screening program. *Am J Prev Med* 1999; 16: 35-59.
- ⁵⁹ Greene PG, Smith DE, Hullett S, Kratt PP, Kennard P. Cancer prevention in rural primary care: an academic-practice partnership. *Am J Prev Med* 1999; 16: 58-62.
- ⁶⁰ Centers for Disease Control. Reducing tobacco use: a report of the Surgeon General – executive summary. *MMWR* 2000; 29 (RR-16).
- ⁶¹ Centers for Disease Control. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems: a report on recommendations of the Task Force on Community Preventive Services. *MMWR* 2000; 49 (RR-12).
- ⁶² Centre for Infectious Disease Prevention and Control. AIDS and HIV in Canada. April 2000. Available from: http://www.hc-sc.gc.ca/hpb/lcdc/bah/epi/ahcan_e.html
- ⁶³ Centre for Infectious Disease Prevention and Control. Recent data indicate HIV infections are rising in Canada among men who have sex with men. November 2000. Available from: http://www.hc-sc.gc.ca/hpb/lcdc/bah/epi/msm1100_e.html
- ⁶⁴ Health Canada. HIV and AIDs among Aboriginal people in Canada. April 2000. Available from: http://www.hc-sc.gc.ca/hpb/lcdc/bah/epi/aborig_e.html
- ⁶⁵ National Asthma Task Force. The prevention and management of asthma in Canada: a major challenge now and in the future. 2000. Available from: <http://www.hc-sc.gc.ca/hpb/lcdc/publicat/asthma00/index.html>
- ⁶⁶ Ontario Ministry of Health and Long-term Care. Taking action on asthma: report of the Chief Medical Officer of Health. 2000. Available from: www.gov.on.ca/health.
- ⁶⁷ Canadian Asthma Consensus Group. Canadian asthma consensus report, 1999. *CMAJ* 1999; 161 (11 Suppl): S1-S62.
- ⁶⁸ Health Canada. Diabetes in Canada: national statistics and opportunities for improved surveillance, prevention and control. Ottawa, 1999.
- ⁶⁹ Ontario Ministry of Health. Taking charge – a new approach to preventing diabetes complications. Toronto, 1995.
- ⁷⁰ Ontario Ministry of Health. Diabetes strategy progress report – June 1999. Toronto, 1999.
- ⁷¹ Meltzer S, Leiter L, Daneman D, Gerstein HC, Lau D, Ludwig S, et al. 1998 clinical practice guidelines for the management of diabetes in Canada. *CMAJ* 1998; 159 (8 Suppl): S1-S29.
- ⁷² Hoffman K, Dupont JM. Community health centres and community development. Ottawa: Health and Welfare Canada, 1992.
- ⁷³ Mattesich and Monsey, 1997, as quoted by Community Services Council, Newfoundland and Labrador. Available from: <http://www.csc.nf.net/capacity/capacity.htm>
- ⁷⁴ American Academy of Pediatrics. Health care for children of immigrant families. July 1997. Policy Statement.
- ⁷⁵ Fowler N. Providing primary health care to immigrants and refugees: the North Hamilton experience. *Can Med Assoc J* 1998; 159: 388-391.
- ⁷⁶ Canadian Pediatric Society. Getting street smart: re-imagining adolescent health care for street youth. 1998. Available from: <http://www.cps.ca/english/proadv/StreetYouth/GettingStreetSmart.htm>.
- ⁷⁷ Rosenberg MW, Moore E.G. The health of Canada's elderly population: current status and future implications. *CMAJ* 1997; 157: 1025-1032.
- ⁷⁸ Bergman H, Beland F, Lebel P, Contandriopoulos A-P, Tousignant P, Brunelle Y, et al. Care for Canada's frail elderly population: fragmentation or integration. *CMAJ* 1997; 157: 1116-1121.
- ⁷⁹ National Center for Injury Prevention and Control. Falls and hip fractures among older adults. November 2000. Available from: <http://www.cdc.gov/ncic/factsheets/falls.htm>.
- ⁸⁰ Canadian Task Force on Preventive Health Care. Prevention of household and recreational injuries in the elderly. Available from: <http://www.ctfphc.org/>

- ⁸¹ Ministry of Health and Ministry Responsible for Seniors. Primary care reform. Available from: <http://www.hlth.gov.bc.ca/cpa/publications/healthcarestrat/primarycare.html>
- ⁸² Fyke KJ. Sustaining a quality system: Commission on Medicare. Saskatchewan, April 2001.
- ⁸³ Ministère de la sante et des services sociaux. Commission d'étude sur les services de sante et les services sociaux. Les solutions émergentes: rapport et recommandations. Quebec. 2000.
- ⁸⁴ Maioni A. "Emerging solutions": Quebec's Clair Commission report and health care reform. McGill University. January 2001.
- ⁸⁵ US General Accounting Office. Community Health Centers: adapting to changing health care environment key to continued success. Washington, 2000.
- ⁸⁶ Health care system in Sweden. Available from: http://www.informatik.umu.se/sweden_info/si/healthcare.html. Accessed March 1999.
- ⁸⁷ King J. (ADM Ontario Ministry of Health and Long-term Care). Sweden/Norway healthcare visit and lecture series. 1996. Notes
- ⁸⁸ King J. (ADM Ontario Ministry of Health and Long-term Care). Health care in Ontario, Canada. SLIDES
- ⁸⁹ Socialstyrelsen. The primary care reform. Final report. Feb 1998. Available from: <http://www.sos.se/sos/publ/refereng/9815002e.htm>
- ⁹⁰ National Health Service. Statistics for general medical practitioners in England: 1990-2000. Bulletin 2001/04. 2001.
- ⁹¹ National Health Service. Primary care, general practice and the NHS plan. January 2001.
- ⁹² Ontario Ministry of Health and Long-Term Care. Primary Care Implementation Strategy Committee. Primary care reform goals, objectives, and targets. Undated.
- ⁹³ Ontario Ministry of Health and Long-Term Care. Primary care reform: information package. June 2000.
- ⁹⁴ Ontario Telehealth Task Force. Recommendations for a telephone health education and triage/advisory service. October 1999. Available from: <http://www.gov.on.ca/MOH/english/pub/ministry/telehealth.html>.
- ⁹⁵ Ontario Ministry of Health and Long-Term Care. Primary Care Network Agreement. Undated.
- ⁹⁶ Government of Ontario. Witmer unveils "Telehealth Ontario". November 2000 Press Release. Available from: <http://www.newswire.ca/government/ontario/english/releases/November2000/30/c9440.html>
- ⁹⁷ Ontario Ministry of Health and Long-Term Care. Harris launches the Ontario Family Health Network. Media Release. March 21, 2001. Available from: <http://www.newswire.ca/government/ontario/english/releases/March2001/21/c5656.html>.
- ⁹⁸ Kardos-Burton M, Loranger D. (Ontario Ministry of Health and Long-Term Care). Directions in primary care reform. Presentation to AOHC Annual Conference, 2000. SLIDES
- ⁹⁹ Association of Ontario Health Centres. Community health centre expansion in Ontario: a business case for strengthening community-based primary health care services. October 2000.
- ¹⁰⁰ Association of Ontario Health Centres. Rural and northern network nurse practitioner final report, Toronto: AOHC, 1999.
- ¹⁰¹ Hay Group. Association of Ontario Health Centres: salary and benefit review report. June 1999.
- ¹⁰² PCCCAR. PCCCAR reports on equitable health human resource distribution: fulfilling underserved area needs. May 1995.
- ¹⁰³ McKendry R. Physicians for Ontario: Too many? Too few? For 2000 and beyond. December 1999.
- ¹⁰⁴ Barer M, Stoddart GL Improving access to needed medical services in rural and remote Canadian communities: recruitment and retention revisited. Centre for health services and policy research. June 1999.
- ¹⁰⁵ Government of Ontario. Harris government announces new northern medical school and increased medical school enrolment. News release. May 17, 2001. Available from: <http://www.newswire.ca/government/ontario/english/releases/May2001/17/c5708.html>
- ¹⁰⁶ Ontario Medical Association. OMA scale of remuneration for salaried physicians revised: adjustments reflect membership survey results. Ont Med Rev 2001; March 2001: 25-29.
- ¹⁰⁷ Canadian Institute for Health Information. Health care in Canada 2001. Ottawa: CIHI, 2001.
- ¹⁰⁸ Ontario Medical Association. OMA scale of remuneration for salaried physicians revised: adjustments reflect membership survey results. Ont Med Rev 2001; March 2001: 25-29.
- ¹⁰⁹ Pinder W. Report on key indicators for community re-investment for the Association of Ontario Health Centres. Toronto: AOHC, 1998.
- ¹¹⁰ Association of Ontario Health Centres. Funding needs acute: a survey. Program demands at CHCs. Toronto: AOHC, 1999.

- ¹¹¹ Campaign 2000. Child poverty in Ontario: report card 2000. Available from: <http://www.campaign2000.ca/>
- ¹¹² Federation of Canadian Municipalities. A national affordable housing strategy. October 2000. Available from: <http://www.fcm.ca>
- ¹¹³ City of Toronto. The Toronto report card on homelessness 2000. 2000. Available from: <http://www.city.toronto.on.ca/homelessness/index.htm>
- ¹¹⁴ Canadian Alliance on Mental Illness and Mental Health. Building consensus for a national action plan on mental illness and mental health. Available from: <http://www.cpa-apc.org/Public/Action/callforaction.asp> Accessed: April 2001.
- ¹¹⁵ Canadian Mental Health Association. Trends in mental health expenditures. Evaluating the Ministry of Health's commitment to mental health services and supports. May 1999.
- ¹¹⁶ Citizenship and Immigration Canada. Facts and figures 1999: immigration overview. Ottawa: Communications Branch, 2000.
- ¹¹⁷ Canadian Council for Refugees. Immigration to Canada: 1979-1999. Available from: http://www.settlement.org/site/Immigration_Citizenship/home.html. Accessed April 2001.
- ¹¹⁸ Ontario Ministry of Health. Access to quality health care in rural and northern Ontario: the rural and northern health care framework. 1997.
- ¹¹⁹ Ontario Ministry of Health. Draft planning guidelines: planning to implement the rural and northern health care framework. Undated.
- ¹²⁰ Ontario Ministry of Health and Long-Term Care. Principles and guidelines for the implementation of the rural and northern hospital networks. May 2000.
- ¹²¹ Center for Addiction and Mental Health. About mental illness. Available from: http://www.camh.net/CLARKEPages/about_illnesses/#MentalIllnessStatistics.
- ¹²² Ontario Substance Abuse Bureau. Setting the course: a framework for integrating addiction treatment services in Ontario. January 1999.
- ¹²³ Ontario Ministry of Health and Long-Term Care. Making it happen: implementation plan for mental health reform. Undated.
- ¹²⁴ Ontario Ministry of Health and Long-Term Care. Integrated services for children. Available from: <http://www.gov.on.ca/health/english/pub/child/intserv.html>
- ¹²⁵ F/P/T Advisory Committee on Population Health. Investing in early child development: the health sector contribution. September, 1999.
- ¹²⁶ F/P/T Advisory Committee on Population Health. The opportunity of adolescence: the health sector contribution. October 2000.
- ¹²⁷ McCain M, Mustard F. Early years study: reversing the real brain drain. Toronto: Children's Secretariat, 1999.
- ¹²⁸ Office of Integrated Services for Children. Implementation guidelines for the healthy babies, healthy children program. 1997.
- ¹²⁹ Ontario Ministry of Health. Planning guidelines for the development of a speech and language services system for preschool children. Undated.
- ¹³⁰ Ontario Ministry of Health and Long-Term Care. Government will check every new baby for hearing problems. News release. December 18, 2000. Available from: <http://www.newswire.ca/government/ontario/english/releases/December2000/18/c4562.html>.
- ¹³¹ Ontario Ministry of Health and Long-Term Care. Business plan 2000-2001. Available from: <http://www.gov.on.ca/MBS/english/press/plans2000/moh.html>.
- ¹³² Aboriginal Healing and Wellness Strategy. What is the Aboriginal healing and wellness strategy? Available from: <http://www.anishinabek.ca/ahws/>.
- ¹³³ Aboriginal Healing and Wellness Strategy. Programs and services. Available from: <http://www.anishinabek.ca/ahws/infoframe.htm>.
- ¹³⁴ Aboriginal Healing and Wellness Strategy. Aboriginal health policy executive summary. Available from: <http://www.anishinabek.ca/ahws/infoframe.htm>
- ¹³⁵ Provincial rehabilitation reference group. Managing the seams: making the rehabilitation system work for people. The rehabilitation reform initiative. March 2000, revised November 2000.
- ¹³⁶ Dwyer JJM, Makin S. Using a program logic model that focuses on performance measurement to develop a program. Can J Public Health 1997; 88: 421-425.

-
- ¹³⁷ ARA Consulting Group. Development of an evaluation plan for Ontario's CHC program: a participative approach. 1995.
- ¹³⁸ Wanke MI, Saunders LD, Pong RW, Church WJB. Building a stronger foundation: a framework for planning and evaluating community-based health services in Canada. Ottawa: Health Canada, 1995.
- ¹³⁹ Association of Ontario Health Centres. Building healthier organizations. Etobicoke, 1998.
- ¹⁴⁰ McEwan K, Goldner EM. Accountability and performance indicators for mental health services and supports: a resource kit. Prepared for the Federal/Provincial/Territorial Advisory Network on Mental Health. Health Canada: Ottawa, 2001.
- ¹⁴¹ Performance indicator frameworks for population health. Report on workshop held on 16 March 2000. Melbourne. Available from: <http://www.dhs.vic.gov.au/nphp/perfinds/attach15.htm>.
- ¹⁴² AOHC Best Practices Steering Committee. Principles for the use and development of clinical and health promotion best practice in community health centres. AOHC, 1999.
- ¹⁴³ Canadian Task Force on the Periodic Health Examination. The Canadian guide to clinical preventive health care. Ottawa: Canada Communication Group, 1994. Available from: http://www.hc-sc.gc.ca/hppb/healthcare/pubs/clinical_preventive/index.html
- ¹⁴⁴ The Task Force On Community Preventive Services. Role of the task force. Available from: www.health.gov/communityguide/taskforc.htm
- ¹⁴⁵ Hutchison B, Hurley J, Reid R, Dorland J, Birch S, Giacomini M, et al. Capitation formulae for integrated health systems: a policy synthesis. Ottawa: Health Services Research Foundation, 1999.
- ¹⁴⁶ Chase D, Davies P. The calculation of a practice underprivileged area (UPA) score. *Br J Gen Practice* 1991; 41: 63-66.
- ¹⁴⁷ Last JM. A dictionary of epidemiology. 3rd ed. Toronto: Oxford University Press, 1995.
- ¹⁴⁸ Cannock R, Miller P. Primary care groups. Pie in the sky. *Health Serv J* 2000; 110: 26-7.

GLOSSARY

AOHC:	Association of Ontario Health Centres
BBBF:	Better Beginnings, Better Futures
CAS:	Children's Aid Society
CCAC:	Community Care Access Centre
CDC:	Centers for Disease Control and Prevention (US)
CHC:	Community Health Centre
CHPB	Community and Health Promotion Branch
CLSC:	Centres Local De Services Communautaires
CSC:	Community Sponsored Contracts
DHC:	District Health Council
ED:	Executive Director
FFS:	Fee for Service
F/P/T:	Federal/Provincial/Territorial
FTE:	Full Time Equivalent
GP:	General Practitioner
HBHCP:	Healthy Babies, Healthy Children Program
HMO:	Health Maintenance Organization
HSO:	Health Service Organizations
HSRC:	Health Services Restructuring Commission
IOM:	Institute of Medicine (US)
MCSS:	Ministry of Community and Social Services
MD:	Medical Doctor, Physician

NGFP:	Northern Group Funded Plans
NGO:	Non-governmental Organization
NP:	Nurse Practitioner
OCFP:	Ontario College of Family Physicians
ODB:	Ontario Drug Benefits
OHIP:	Ontario Health Insurance Program
OMA:	Ontario Medical Association
PCCCAR:	Provincial Coordinating Committee on Community and Academic Health Science Centre Relations
PCN:	Primary Care Network
RN:	Registered Nurse
SW:	Social Worker
THAS:	Telephone Health Advisory Service

APPENDIX 1 - MINISTRY STRATEGIES AND RELATED DOCUMENTS REVIEWED

The following documents were reviewed:

Primary Care Reform

Health Services Restructuring Commission. Primary health care strategy. December 1999. Available from: http://www.hsrc.gov.on.ca/e_menu.htm

Ontario College of Family Physicians. Family medicine in the 21st century – implementation strategies: a discussion paper. April 2000.

Provincial Co-ordinating Committee on Community and Academic Health Science Centre Relations. New directions in primary health care. 1996.

Primary Care Implementation Strategy Committee. Primary care reform goals, objectives, and targets. Undated.

Ontario Ministry of Health and Long-Term Care. Primary care reform: information package. June 2000.

Ontario Telehealth Task Force. Recommendations for a telephone health education and triage/advisory service. October 1999. Available from: <http://www.gov.on.ca/MOH/english/pub/ministry/telehealth.html>.

Ontario Ministry of Health and Long-Term Care. Primary Care Network Agreement. Undated.

Proposed Inter-professional Primary Health care Groups (PCGs) Costing Models. A technical costing report prepared by Milliman & Robertson, Inc. (Actuaries and Consultants) for the Health services Restructuring Commission's Primary Health Care Strategy, December 1999.

Building a Stronger Foundation. Component 1 – Health Human Resources in Community-Based Health Care: A Review of the Literature. A Report Prepared for the Federal, Provincial and Territorial Deputy Ministers of Health. Health promotion and Programs Branch – Health Canada. 1995.

Nurse Practitioners

The Need for Nurse Practitioners in Ontario – Summary report of the Assessment of the Need for Nurse practitioners in Ontario. Prepared by McMaster School of Nursing, March 1995

Children's Programs

Early Years Study – Final Report. Reversing the Real Brain Drain. April 1999.

Planning Guidelines for the Development of a Speech and Language Services System for Preschool Children. Queen's Printer for Ontario, 1996.

Preschool Speech and Language Initiative – Planning Guidelines for Transition to School. Queen's Printer for Ontario, October 2000.

Implementation Guidelines – Phase 2 for The Healthy Babies, Healthy Children Program. Queen's Printer for Ontario.

Postpartum Implementation Guidelines for The Healthy Babies, Healthy Children Program. Queen's Printer for Ontario.

Implementation Guidelines for The Healthy Babies, Healthy Children Program. Queen's Printer for Ontario.

Early Identification Guidelines for the Healthy Babies, Healthy Children. Queen's Printer for Ontario.

Early Identification Guidelines Appendix Package for Healthy Babies, Healthy Children.

Diabetes

Ontario Ministry of Health. Taking charge – a new approach to preventing diabetes complications. Toronto, 1995.

Ontario Ministry of Health. Diabetes strategy progress report – June 1999. Toronto, 1999.

Ontario Ministry of Health and Long-term Care. Diabetes: strategies for prevention. A report of the Chief Medical Officer of Health. Toronto, 1999.

Asthma

Taking action on asthma: report of the Chief Medical Officer of Health. 2000. Available from: www.gov.on.ca/health.

Mental Health

Making It Happen – Implementation Plan for Mental Health Reform. Queen's Printer for Ontario, 1999

Making It Happen – Operational Framework for the Delivery of Mental Health Services and Supports. Queen's Printer for Ontario, 1999.

Review of Best Practices In Mental Health reform – Prepared for the Federal/Provincial/Territorial Advisory Network on mental Health. Publications Health Canada, Ottawa, Ontario, K1A 0K9, 1998

Aboriginal Wellness and Healing

Aboriginal Healing and Wellness Strategy. What is the Aboriginal healing and wellness strategy?

Aboriginal Healing and Wellness Strategy. Programs and services.

Aboriginal Healing and Wellness Strategy. Aboriginal health policy executive summary.

Rehabilitation

Provincial rehabilitation reference group. Managing the seams: making the rehabilitation system work for people. The rehabilitation reform initiative. March 2000, revised November 2000.

Rural Health

McKendry R. Physicians for Ontario: Too many? Too few? For 2000 and beyond. December 1999.

PCCCAR. PCCCAR reports on equitable health human resource distribution: fulfilling underserved area needs. May 1995.

Barer ML, Wood L, Schneider DG. Toward improved access to medical services for relatively underserved populations: Canadian approaches, foreign lessons. Centre for Health Services and Policy Research, University of British Columbia. May 1999.

PAIRO. From education to sustainability: a blueprint for addressing physician recruitment and retention in rural and remote Ontario. December 1998.

Access to Quality Health care in Rural and Northern Ontario. The Rural and Northern Health Care Framework, June 27, 1997

Draft – Planning Guidelines – Planning to Implement the Rural and Northern Health Care Framework.

Remarks Made By The Honourable Jim Wilson, Minister of Health Re: Rural and Northern Health Care Framework and Community-Based Long-Term Care Services at Alexandra Marine and General Hospital. June 27, 1997.

AOHC Rural and Northern CHC – Primary Care Project. Final report, Spring 1998

AOHC Rural and Northern CHC Network – 1998/99 Project Summary

Doyle, J., Barkley, M. and Shea, J. Optimizing 24-Hour service in rural and Northern Communities – Final Report, March 1999

AOHC Research paper on Rural and Northern Health Care Issues: Results of a Review of Published Documents, Winter 1998.

Derraugh, E and Lafreniere, Ginette. Rural and Northern Health care project: The State of Health Promotion and Primary Prevention in Rural and Northern CHC's in Ontario. Research Project Submitted to the Rural and Northern CHC Committee.

Snyder, Margaret. Rural and Northern Network. Nurse practitioner Project – Final report, March 1999.

APPENDIX 2 – SITE VISIT QUESTIONNAIRE

Background

As part of the Strategic Review of the CHC Program, the project consultants will be performing site visits to selected CHCs. The visits are intended to give the consultants an opportunity to meet a variety of CHC staff and to inform them on particular aspects of practices and characteristics. This questionnaire will inform CHCs of the key issues which need to be covered during the site visit. The project coordinator (Joanne Doyle) will be available to assist CHCs to structure the visit accordingly and to pull together profile information on the CHC for the consultants prior to the visit.

Community Involvement

CHCs involve their communities to determine needs and priorities.

- How does the CHC work with its community to assess community needs?
- How does the CHC incorporate community input in the delivery of services?
- How does the CHC involve the community in the evaluation of services?

Programming for Groups

In addition to services to individuals, CHCs will also provide programming to groups of clients.

- For what issues or conditions, does the CHC provide group programming?

Community-Based Programming

An important component of CHC services is involvement in the delivery of community programming that will address major health risks and determinants. This type of programming is developed and delivered with the community to improve community capacity frequently using a community development approach.

- What are some examples of community-based programs that address major health risks and determinants that the CHC is involved with?
- What is the intended purpose of the program?
- How was this issue identified?
- What other community partners are involved?

Recruitment, Retention and Skill Utilization

CHCs provide services to groups who were previously under-served. Service delivery depends upon the successful recruitment and retention of staff and the full utilization of their skills.

- What has been the CHC's experience with recruiting and retaining staff?
- If problems with recruitment and retention have been experienced, what factors have contributed to this? What would assist the CHC to better resolve these problems in the future?
- Do staff feel that their skills are being fully utilized currently? If not, what should occur to achieve this?

Coordination of Services

CHCs employ a variety of service providers. How these providers work together is an important contributor to how CHCs deliver integrated services. In addition, CHC clients will frequently require the services of other agencies and providers. Coordination of these various services is necessary.

- What disciplines are involved in the delivery of primary care services at the CHC?
- What advantages and challenges have been experienced in having multiple providers?
- What mechanisms are in place to facilitate communication between providers?
- The greater the number of providers and/or the more complex the issue, the greater the need is for case coordination and management. In these instances, how is care coordinated or managed? Does someone take primary responsibility for the coordination? (see example below)

Example: An elderly diabetic patient with heart disease who lives on her own has multiple needs. Her blood sugars are not in good control. She is on multiple medications, has a lower leg ulcer, diabetic retinopathy, and having trouble living on her own since her husband recently died. She needs multiple provider involvement (MD, NP, CCAC,

ophthalmology, chiropody, diabetic skin care expertise, diabetic education, etc.). How would her care be organized and coordinated by the CHC?

- To what extent does the CHC provide coordination of services beyond health services? (eg. housing, social services, education, immigration, etc.)
- Are there other agencies that deliver services from CHC sites?
- Please provide a brief overview of the programs that the CHC receives additional funding to provide. How do these fit/integrate with the rest of CHC services?

Addressing Access Barriers

CHCs provide services to populations which, for a variety of reasons, will have difficulties accessing services (eg. homeless, first language other than English, mental health problems, etc.)

- To what extent is the CHC client population made up of individuals with significant challenges to accessing services?
- In what ways does the CHC strive to make services more accessible? (ie need examples for the different involved populations)
- Physiotherapy services are one example of a service that can be difficult to access. How does your CHC arrange for physio services?

Referral to CHC Services

- Do non-CHC physicians refer their patients to any CHC services or programs? What programs?
- Is there potential for a greater role for CHCs to deliver specific services to the patients of non-CHC physicians?

24/7 Coverage

- To what extent are they able to provide 24/7 coverage?
- Does this involve use of non-CHC providers?

Enrollability of Clients

- To what extent could CHC clients be "enrolled"? (identifiable, fixed address)

Current Trends

- Has there been any change in client needs (ie volumes, acuity, issues, etc.) over the past few years? What evidence to support this?
- Is there a waiting list for services at the CHC? Which services? Why?

Budget

Primary care reform has introduced the concept of a broader range of funding mechanisms for the delivery of primary care services.

- What advantages and disadvantages are there for the current budget structure and process?
- What, if any, improvements would you suggest in the future?

Community Governance

- What advantages and challenges has the CHC experienced with having a community board?
- How has the board influenced the delivery of services?

Health Conditions

Your CHC was identified for one or more health conditions/issues and questions were provided to gather information on current CHC practices and approaches. In addition to the questions asked in the health condition questionnaire, do you wish to elaborate on any particular issues or challenges of providing care and services for the health conditions/issues?

APPENDIX 3 – HEALTH CONDITIONS

In order to assess whether CHCs utilize comprehensive approaches and strategies for important health issues, CHC practices for several health conditions and issues were reviewed. The health conditions were selected using the following considerations:

- issue or problem of importance to CHC target populations
- issue or problem of strategic importance to the Ministry
- issue or problem likely requiring a comprehensive approach to prevention and/or management

A suggested list of conditions was reviewed by the Ministry and the Project Steering Committee. The following twelve health conditions and issues were selected:

- Health determinants
- Mental health
- Perinatal Health and Early Child Development
- Youth Services
- Elderly
- Immunization
- Cancer Screening
- HIV
- Asthma
- Diabetes
- Tobacco

Questionnaires were developed based upon a review of available best practices, and responses were received from the majority of CHCs. CHCs were selected from urban, smaller urban, multi-cultural, northern and/or rural perspectives. The following table lists the responding CHCs per topic followed by the questionnaires used for each condition.

Health Condition/Issue	Responding CHCs
Primary Health Determinants	Carlington Centretown Davenport-Perth Lawrence Heights Regent Park Woolich
Immigration	Access Alliance Black Creek Davenport-Perth North Hamilton CHC Pinecrest-Queensway Regent Park South East Ottawa York Community Services

Health Condition/Issue	Responding CHCs
Mental Health	Carlington Davenport-Perth London Inter-Community North Lanark Pinecrest-Queensway Regent Park Sandy Hill South East Ottawa York Community Services
Cancer Screening	Davenport-Perth Flemingdon Four Villages LAMP North Hamilton South Riverdale
Youth	Central Toronto Davenport-Perth LAMP North Lanark South East Ottawa Teen Health Centre Youth Centre
Perinatal Health	Davenport-Perth Guelph North Kingston Somerset West South East Ottawa Woolich
Seniors	Anne Johnston Barrie Centretown Four Villages Sandwich West Hill
Immunizations	Flemingdon Four Villages LAMP North Lanark Pinecrest-Queensway Somerset West South Riverdale

Health Condition/Issue	Responding CHCs
Diabetes	Barrie Centretown Estrie London Inter-Community North Lanark Odgen East End Sandwich
Asthma	Barrie Four Villages LAMP Lawrence Heights South Riverdale
Tobacco	Pinecrest-Queensway Regent Park Somerset West South Riverdale
HIV	Central Toronto Lawrence Heights London Inter-Community North Hamilton Regent Park Sandy Hill Somerset West

Health Condition Questionnaires

Asthma

Education

Does the CHC have an education program for children and their families who have asthma?

Does the program have clear goals? Is the content clearly identified? Does it include how to minimize environmental factors that contribute to asthma? Does this include avoidance of exposure to tobacco smoke?

How is assistance with environmental factors given to low income families? (eg. medications, spacers, mattress enclosures, peak flow meters)

Does the program rely on books or videotapes or does it involve individual/group teaching?

Care

Is the diagnosis of asthma confirmed by spirometry? Is monitoring of pulmonary function at the CHC routine?

Do patients with asthma have a written action plan based on self-monitoring (either PEF or symptoms)? Please provide an example of a plan.

Prevention

Are there any indoor air quality issues in their community which they are aware of? If so, how have they addressed these issues?

Promotion of breastfeeding and delaying introduction of solid foods?

Is there any other asthma programming that the CHC provides not captured above?

Cancer Screening

Is your CHC able to know what % of women aged 50-70 have had a screening mammogram in the preceding 2 years?

Is your CHC able to know what % of women aged 20-70 have had a Pap smear in the preceding 2 years?

Are automatic reminders used for providers to remind them a patient is due for a screening test?

Are reminders sent to patients to remind them they are due for a screening test?

Are any efforts made for outreach to populations (eg. immigrant women) who are less likely to have been screened in the past?

Is there any other CHC programming directed at breast and cervical cancers screening not covered by the questions above.

Diabetes

Organizational Responses

To what extent is care organized around an interdisciplinary diabetes health care team?

- is there a nurse educator that sees patients with DM? Where are they located?
- is there a nutritionist? Where are they located?
- Is there a chiropodist? Where are they located?
- Is there a particular endocrinologist/internal medicine specialist who is consulted in the care of patients with DM?
- Access to neurology, nephrology, ophthalmology?

Have any particular efforts been made to incorporate the Canadian practice guidelines in the CHC?

Is any system of reminders for diabetes assessment and management used? Is there any system in place to ensure follow-up at recommended intervals (eg. 2-4 months)?

What efforts are made to coordinate care of patients with diabetes? How is communication assured between team members?

Patient Education

When patients are initially diagnosed with diabetes are they provided with education about this disorder? If so, how is this done?

What, if any, ongoing education occurs for people with diabetes?

Does education include: self-monitoring, interpretation of results and where possibly modify treatment?

Do patients receive education on nutrition from a registered dietician? Is this arranged routinely?

Screening and Care

To what extent are CHC clients screened for diabetes? (pregnant women, older adults, ethnic groups) How is this encouraged or supported?

Are pregnant women screened for gestational DM?

To what extent do patients with DM receive annual ophthalmologic examinations?

Do patients with DM have their feet examined at least annually? Does the CHC utilize a foot care professional to assist with its patients with diabetes?

Prevention & Lifestyle Modification

What programming is available to promote and assist individuals to:

- exercise regularly
- eat a balanced diet

Is there any other diabetes programming provided by the CHC that is not covered above?

Elderly

Are multi-disciplinary post-fall assessments performed on elderly patients who have fallen? If so, please describe make-up of team and nature of assessment.

What does the CHC do to promote physical activity in the elderly?

How does the CHC review the medications used by elderly patients?

Does the CHC check the vision of elderly patients? How, how often?

Does the CHC check the hearing of elderly patients?

To what extent does the CHC make services more accessible to elderly patients? (eg. home visits)

To what extent does the CHC encourage and support socialization of elderly clients? To what extent is this done to assist elderly groups with linguistic or cultural barriers to broader social participation?

To what extent does the CHC attempt to provide case management for elderly clients? Please describe.

Is there any other CHC programming targeted at the elderly that is not captured above?

HIV

Prevention of Infection

Does the CHC provide either by itself or in partnership with others a HIV prevention program? If so, please provide details on the program including: target population, type(s) of intervention, learning theory basis to the program, length and degree of participation in program, relationship to published programs.

Is the CHC involved in a needle exchange program?

Does the CHC make condoms freely available?

Early Detection of Infection

To what extent does the CHC provide easily accessible HIV testing? (eg. non-nominal testing on walk-in basis, anonymous testing, etc.)

Does the CHC perform any outreach to populations at higher risk of infection? (eg. immigrants, refugees, aboriginal, IDUs, sex-trade workers, etc.)

Clinical Management of HIV-Infected Clients

To what degree does your CHC provide clinical services to HIV-infected clients?

What linkages does your CHC have with specialist HIV care?

What efforts has the CHC taken to ensure that care follows up-to-date guidelines?

Support for HIV-Infected Clients

What linkages does your CHC have with HIV+ support groups?

What involvement has your CHC had for supportive housing, hospice service, and palliative services?

What involvement has your CHC had in local/regional AIDS services' planning?

Are there other aspects of HIV programming that the CHC has been involved in that have not been captured above?

Immigration

Tuberculosis

To what extent are CHC clients educated about TB?

Does the CHC offer TB screening? How, to whom?

Does the CHC provide DOT to infected clients?

Delivery of Services

Does the CHC perform immigration health examinations?

To what extent are service providers able to communicate in the language of the CHCs clients?

What steps does the CHC take to address the linguistic needs of clients?

To what extent have services been tailored to the ethnocultural needs of clients?

How does the CHC assist clients without health insurance? To what extent is this a problem faced by clients at this CHC?

How are the mental health needs of this population addressed?

Is there any other CHC programming for immigrant populations not covered by the questions above?

Is any system of reminders (eg. postcards, telephone calls, etc.) used for clients to tell them their immunization is due or late?

Is any system of reminders (eg. flagged chart) used for providers to tell them the client's immunization is due or late? (children's, pneumococcal, influenza)

Are immunizations offered as part of home visits?

Is expanded access offered through drop-in clinics, express vaccination services, or other strategies?

Childhood

Do you know what proportion of clients at age 2 have received all of their required immunizations?

Elderly

Do you know what proportion of clients aged 65 and above have received the pneumococcal vaccine?

Do you know what proportion of clients aged 65 and above have received the influenza vaccine each year?

Does the CHC do any particular promotional or outreach work to encourage pneumococcal and/or influenza vaccination in the elderly?

Does the CHC do any particular promotional or outreach work to encourage immunization in special populations (eg. immigrants)

Is there any other CHC programming targeted at increasing immunization coverage not covered by the questions above?

Mental Health and Addictions

MENTAL HEALTH

Assertive Community Treatment/Case Management

For individuals disabled by mental illness at risk of recurrent hospitalization, assertive community treatment have been shown to be superior for improving clinical status and reducing hospitalization. ACT programs include: assertive outreach; continuous individual support; services predominantly provided in community vs in office; support tailored to meet needs of individual; involvement of consumers and family. Clinical case management provided to clients with less intensive needs.

To what extent does the CHC have clients with significant disability due to mental illness?

Are these clients being served by an assertive community treatment service? What role does the CHC play in this service?

For clients with less intensive needs, do they receive clinical case management services? What role does the CHC play in this service?

Crisis Response/Emergency Services

To what extent, if any, does the CHC participate in crisis programs? (eg. telephone crisis services, mobile crisis units, etc.)

Housing

To what extent, if any, does the CHC assist individuals with mental illness, including the homeless mentally ill, to locate and maintain housing?

Links Between Inpatient/Outpatient Care

Has your CHC established any linkages between family physicians and mental health specialists for the ongoing care of clients with mental illness?

Self-Help and Consumer Initiatives

To what extent, if any, does the CHC support or sponsor self/mutual support for individuals with mental illness?

To what extent has the CHC been involved in advocacy efforts for services and supports for people with mental illness?

Vocational/Educational Services

To what extent, if any, does the CHC provide/support/use vocational services for supported employment?

Planning and Building of Mental Health Services

To what extent has the CHC been involved in the planning of local/regional mental health services?

Other Mental Health Services Issues

Are there any other mental health services that you provide that have not been captured above?

Do you provide mental health services targeted at any specific populations? (eg. refugees, immigrants, aboriginal, etc.)

ADDICTIONS

Does the CHC perform addictions' assessments or are clients referred to another agency?

Does the CHC provide any individual or group addictions counseling?

What linkages has the CHC made with residential treatment programs and recovery programs?

Does the CHC provide in-home withdrawal management? How does this work?

Does the CHC utilize any harm reduction strategies? (eg. needle-exchange, methadone treatment)

Has the CHC worked with other health and social agencies to develop and build community addiction services?

Does the CHC provide any targeted addiction services to specific populations? (eg. youth, seniors, women, dual diagnosis, people with HIV, aboriginal people, francophones, ethnocultural communities, homeless people, etc.)

Is there any other CHC addictions' programming that has not been captured in the questions above?

Perinatal Health

What programming does the CHC provide to assist pregnant women stop smoking?

What does the CHC do to promote folic acid supplementation in pregnant women?

What does the CHC do to encourage reduction/elimination of alcohol and drug use in pregnant women?

Does the CHC offer multi-component interventions for pregnant at high-risk of low birthweight? What are the components?

To what extent is the CHC involved with the Healthy Babies, Healthy Children program?

Does the CHC provide any additional outreach or home visits to high risk pregnant or parenting families?

How does the CHC encourage regular prenatal care of pregnant women, particularly those who are very high risk? (eg. pregnant street youth)

Is there any other programming the CHC provides in the area of perinatal health?

Health Determinants

How does the CHC address difficulties of individuals with low income to fully access required health services? (eg. medications, physiotherapy, etc.)

How has the CHC been working with its community to address primary health determinants?

- what issue(s)
- how identified
- how working on it with community; ie actions
- short and long term objectives
- progress to date

Tobacco

Has there been an education program for providers to identify, advise and assist tobacco-using patients in cessation efforts?

Is there a reminder system for providers to inform or prompt them to determine patient's tobacco-use status and/or deliver brief advice to quit?

To what extent do providers inquire about smoking status and provide advice regarding cessation?

To what extent are pharmacologic treatments for smoking cessation utilized for those wishing to quit smoking?

Is any assistance provided to clients to reduce the cost of effective pharmacologic treatments for smoking cessation?

Does the CHC provide telephone support or encourage use of such support for clients trying to quit?

Has the CHC been involved in advocacy efforts for reducing exposure to ETS and/or increasing the price of tobacco products?

Is the CHC involved in any other tobacco-related programming?

Youth

Sexual Health Services

What sexual health counseling is available at the CHC for youth?

Does the CHC provide contact tracing?

Does the CHC offer drop-in services for youth? (eg. pregnancy testing, ECP, STD treatment and testing, HIV testing, condom dispensing)

High Risk Youth

Does the CHC engage in any skill building programming with high risk youth?

What linkages does the CHC have with other youth service provider agencies?

Does the CHC provide outreach services to high risk and street-involved youth?

How does the CHC tackle the multiple needs and challenges faced with providing services to street/high risk youth? To what extent has integrated service delivery been organized for youth?

Other Services

Is there any other programming specifically targeted to youth not captured above?

APPENDIX 4 – CONTACTS MADE WITH OTHER JURISDICTIONS

Items Covered in Interviews with Contacts from Other Jurisdictions

1. Describe the primary care reform in your province. (goals, objectives, principles, characteristics)
2. Do they have organizations comparable to Ontario's CHCs?
3. If yes to 2, which characteristics are the same and which are different?
 - community governance
 - populations served (general vs "hard to serve" populations – how define "hard to serve"); is there any particular key learnings in how to deliver services to high needs populations?
 - extent of programming (PCCCAR basket of services + community development + speech and language + physiotherapy + emergency services + LTC + secondary services e.g. diagnostics, specialist services, etc.)
 - to what extent are these organizations "hubs" of health and social services in the community; what proportion of overall services are primary health care?
 - linkages to other community agencies (including hospitals and organizations like CCACs)
 - staffing
 - funding (pure program based, capitation, based on service volumes)
 - accountability (contracts, program evaluation and accreditation)
 - accountability to government (regional health authorities, etc.)
4. What accounts for any differences in your opinion?
5. What factors contribute to the success of your "CHC-like" organizations? What are the challenges?
6. What impact is primary care reform having on your "CHC-like" organizations?
7. Other issues of relevance not covered above?

List of Other Jurisdictions Contacted

Jurisdiction	Name	Organization
Saskatchewan	Patrick Lapointe	Saskatoon Community Clinic
	Silvia Keall	Saskatchewan Health
Manitoba	Jeanette Edwards	Winnipeg Regional Health Authority
	Bev-Anne Murray	Manitoba Health
PEI	Mary Arsenault	Four Neighbourhoods Health Centre, Charlottetown
England	Peter Bundred	Primary Care Medicine, University of Liverpool
USA	Thomas Curtin	Director Department of Clinical Affairs National Association of CHCs
New Brunswick	Monica Chaperlin	Director, St. John CHC
Quebec	Terry Kaufman	Director, Notre-Dame-de-Grace, Montreal West
British Columbia	Barbara Bell	Director, REACH CHC
Alberta	Loraine Melchior	Executive Director, Calgary Urban Project Society
Sweden	Mats Ribacke	Medical Director, National Board of Health and Welfare

APPENDIX 5 – STEERING COMMITTEE MEMBERS

Mary Kardos-Burton (Executive Director, Health Care Programs)

Chairperson

Dorothy Loranger (Director, Community and Health Promotion Branch)

Marsha Barnes (Director, Alternate Payment Programs Branch)

Barry Monaghan (Senior Consultant, Primary Care Networks Program)

Phil Jackson (Director (A), Population Health Strategies)

Sue Davey (Co-ordinator, Community and Health Promotion Branch)

David Thornley (Program Associate, Community Health Centre Program)

Gary O'Connor, Executive Director, Association of Ontario Health Centres

Carolyn Acker, Executive Director, Regent Park CHC

Wanda McDonald, Executive Director, North Lanark CHC

Brent Moloughney, Consultant

Chandrakant Shah, Consultant

JoAnne Doyle, Project Co-ordinator

APPENDIX 6 – COMMUNITIES CURRENTLY HAVING A CHC

REGION	OFFICES
<u>Central East Region</u>	<u>Ajax</u> <u>Barrie</u> <u>Oshawa</u>
<u>Central South Region</u>	<u>Hamilton</u> <u>Hamilton-Wentworth-Niagara</u> <u>Welland</u>
<u>Central West Region</u>	<u>Cambridge</u> <u>Guelph</u> <u>Kitchener</u> <u>St. Jacobs</u>
<u>East Region</u>	<u>Cornwall</u> <u>Kingston</u> <u>Lanark</u> <u>Merrickville</u> <u>Ottawa</u> <u>Portland</u> <u>Tweed</u>
<u>North Region</u>	<u>Ignace</u> <u>Longlac</u> <u>Sudbury</u> <u>Thunder Bay</u> <u>Timiskaming</u> <u>Timmins</u>
<u>South West Region</u>	<u>Forest</u> <u>Grand Bend</u> <u>London</u> <u>West Lorne</u> <u>Windsor</u>
<u>Toronto Region</u>	<u>Toronto</u>

From: http://www.gov.on.ca/health/english/contact/chc/chcloc_mn.html

APPENDIX 7 –PCCCAR LIST OF MANDATORY FUNCTIONS TO BE PROVIDED BY ALL PRIMARY CARE AGENCIES

- Health assessment
- Clinical evidence-based illness prevention and health promotion
- Appropriate interventions for episodic illness and injury
- Primary reproductive care
- Early detection, initial and ongoing treatment of chronic illnesses
- Care for the majority of illnesses (in conjunction with specialists as needed)
- Education and support for self-care
- Support for care in hospital, in home and in long-term care facilities
- Arrangements for 24-hour/7-day a week response
- Service co-ordination and referral
- Maintenance of a comprehensive client record for each rostered consumer in the primary health care agency
- Advocacy
- Primary mental health care including psycho-social counseling
- Coordination and access to rehabilitation
- Support for people with a terminal illness

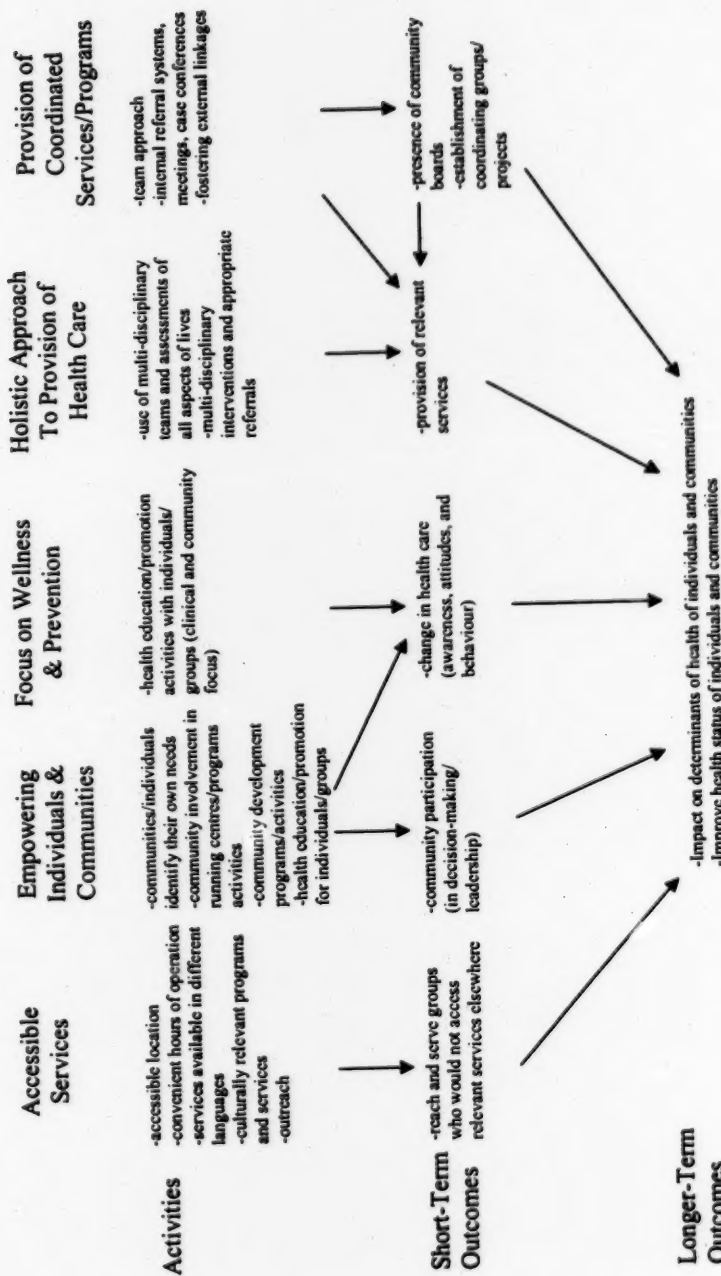
APPENDIX 8 - ALIGNMENT OF THE CHC PROGRAM WITH KEY MINISTRY STRATEGIES

Strategy	CSF	Strength	Limitations
Primary Care Reform (including Nurse Practitioners)	Identify core set of primary care services to be delivered in all CHCs	History of delivery of comprehensive services; consistent with values and objectives of program	Nil
	Deliver services beyond typical weekday office hours	Have been providing on-call services during these hours	Limited number of providers in many CHCs; require staff willingness to work evenings and weekends
	Assess feasibility of enrollment of clients	Already have clients registered	Unknown extent to which registered clients use other providers; not likely possible to enroll all of the client populations in all CHCs
	Assess alternative mechanisms of payment (incentive payments, use of capitation as component of funding)	Historically funded on a program based budget	Historical funding not directly linked to service provision levels; no existing standards/expectations for service delivery levels; extent to which current variations in service delivery levels are justifiable unknown; development of capitation model difficult for high risk populations
	Use of quality performance measures	Evaluation framework information system being implemented	System not developed with clinical performance measures in mind; Currently unable to generate reliable data for indicators being used in PCNs

Strategy	CSF	Strength	Limitations
Rural and Northern Services	Need to clarify potential overlap of roles of CHCs versus local hospitals, (hub to deliver health and other services; CHCs providing hospital services)	History of CHCs providing range of services; History of CHCs providing emergent type care in rural/north; rural/northern CHC physicians currently provide hospital services;	Focus of rural and northern framework to-date has been on hospital services
Physician Supply	Ability of CHCs to be able to recruit/retain providers	Infrastructure with multi-disciplinary staff to ease recruitment and retention and continuity of services	Salaries may not be competitive
	Need to set salary rates at competitive levels and utilize staff to full extent of their training	History of employing NPs and alternatively funded MDs	Salary levels may not be competitive; ? full integration of NPs in all CHCs
Disease/Population Specific Strategies: Mental health, Diabetes, HBHCP, PSLP, Asthma, LTC, Disease Prev/Health Promotion, Aboriginal Health/Wellness Rehabilitation	CHCs identify that a core CHC role is to deliver provincial programming to local and regional populations	History of involvement of CHCs in delivery of these programs;	Involvement has been on ad hoc basis
	Ministry identifies that a core CHC role is to deliver provincial programming to local and regional populations	Some Ministry strategies have identified specific local delivery mechanisms;	Local delivery mechanisms are not specifically identified in many of the strategies; no regional structure for planning/delivering health services; CHCs are relatively small in number across the province (therefore can't cover province);

APPENDIX 9 - CHC PROGRAM LOGIC MODEL

CHC Logic Model (Current)



From: ARA Consulting, 1992

APPENDIX 10 - ALTERNATIVE PROGRAM LOGIC MODEL

CHC Logic Model - Alternative

